Public Utilities

Volume 67 No. 4 February 16, 1961

REPRINTS OF ARTICLES
(200 or more copies)
available on orders received within 30 days after publication date.
Address
WASHINGTON OFFICE
for quotations.

PUBLIC UTILITIES FORTNIGHTLY . . stands for federal and state regulation of both privately owned and operated utilities and publicly owned and operated utilities, on a fair and nondiscriminatory basis; for nondiscriminatory administration of laws; for equitable and nondiscriminatory taxation; and, in general—for the perpetuation of the free enterprise system. It is an open forum for the free expression of opinion concerning public utility regulation and allied topics. It is supported by subscription and advertising revenue; it is not the mouthpiece of any group or faction; it is not under the editorial supervision of, nor does it bear the endorsement of, any organization or association. The editors do not assume responsibility for the opinions expressed by its contributors.

Subscriptions: Address correspondence to PUBLIC UTILITIES FORTNIGHTLY, circulation department, 332 Pennsylvania Building, Washington 4, D. C. Allow one month for change of address.

Entered as second-class matter April 29, 1915, under the Act of March 3, 1879, at the Post Office at Baltimore, Md., December 31, 1936.

Single copies $1.00. Annual subscription price (26 issues a year): United States and possessions, $15.00; Pan American countries, $15.00; Canada, $16.00; all other countries, $17.50.

Public Utilities
FORTNIGHTLY

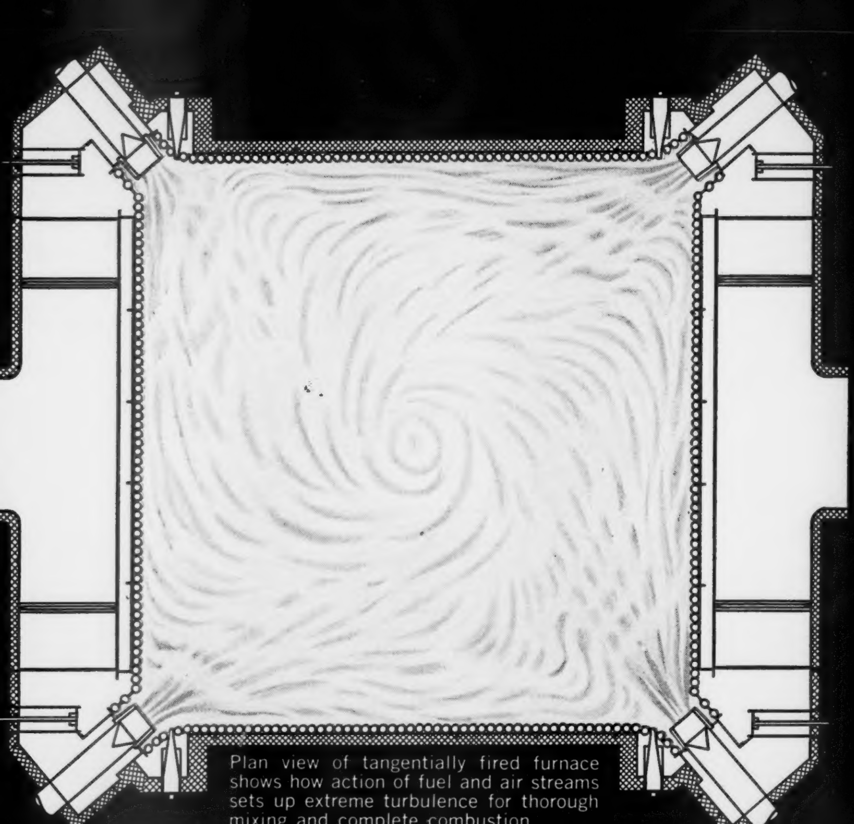
VOLUME 67 FEBRUARY 16, 1961 NUMBER 4

ARTICLES

FEATURE SECTIONS

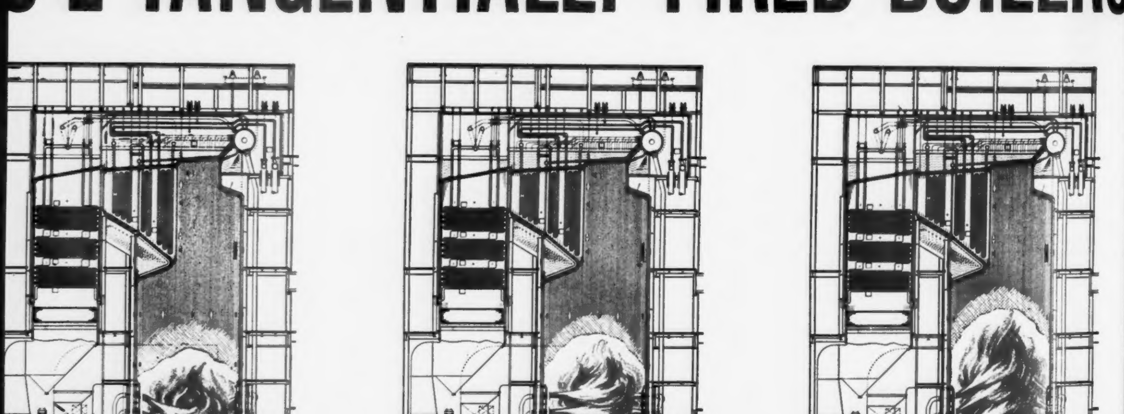
PUBLIC UTILITIES REPORTS, INC., PUBLISHERS

Executive, Editorial & Advertising Offices ....332 PENNSYLVANIA BLDG., WASHINGTON 4, D. C.
Publication Office ....CANDLER BUILDING, BALTIMORE 2, MD.



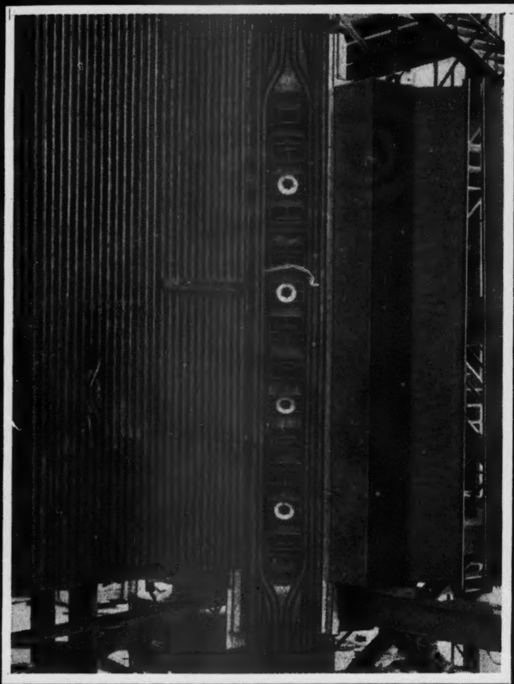
Plan view of tangentially fired furnace shows how action of fuel and air streams sets up extreme turbulence for thorough mixing and complete combustion.

C-E TANGENTIALLY FIRED BOILERS



HOW C-E TILTING TANGENTIAL BURNERS CONTROL SUPERHEAT.

First diagram shows burners tilted downward to reduce furnace outlet temperature. Middle diagram shows normal operating position. Third diagram shows upward tilt to send higher temperature gases to superheater.



Erection view showing shop assembled burner panel being placed in position for welding to wall panels. All four corners of the furnace are similarly equipped.

RS

give more complete combustion... most sensitive steam temperature control

Tangential firing—pioneered by Combustion in 1927—is today the most widely accepted method of firing pulverized coal, gas or oil, separately or together, in large utility boilers. Air and fuel are fed to the furnace in a number of relatively small streams which are directed from each of the four corners of the furnace.

This assures intimate mixing and sets up a strong turbulent motion within the furnace . . . to produce the most complete combustion with minimum carbon loss. The combustion gases fill the furnace for more rapid heat transfer to the waterwalls.

The tilting nozzles of C-E Tangenti Burners automatically tilt up or down steam temperature varies. If steam temper ture goes too high, the nozzles tilt downwa . . . more furnace wall surface becomes effe tive . . . gas temperature to superheat surfa is lowered . . . steam temperature goes dow Or, if steam temperature drops, the nozzl tilt upward . . . hotter gases go to the supe heater . . . steam temperature goes up.

Catalog PC-8 gives full information tangentially fired C-E boilers, including uni with capacities as low as 70,000 lb of stea per hour. Write for your copy today.

Pages with the Editors

During the early part of January it seemed as if scarcely a day went by without some report or study being filed with the new Congress or elsewhere on the subject of reorganizing the federal regulatory agencies or reforming their practices and procedures. Starting off with the controversial Landis report, filed even before the new Congress got on the Washington scene, there was the staff report of the Harris Subcommittee on Legislative Oversight. Then there was the report of the Harris group itself.

There was also the 900-page staff report of the Senate Commerce Committee calling for sweeping changes in the nation's transportation policies. There were recommendations about creating a Cabinet-level transportation department in former President Eisenhower's Budget Message. There was the report of the Kennedy-Johnson natural resources advisory committee. There were other task force reports bearing indirectly on the same subject, and, of course, the inevitable trickle of bills introduced in Congress to carry out such recommendations.

A superficial reaction to this avalanche of criticism might lead one to jump to the conclusion that regulatory

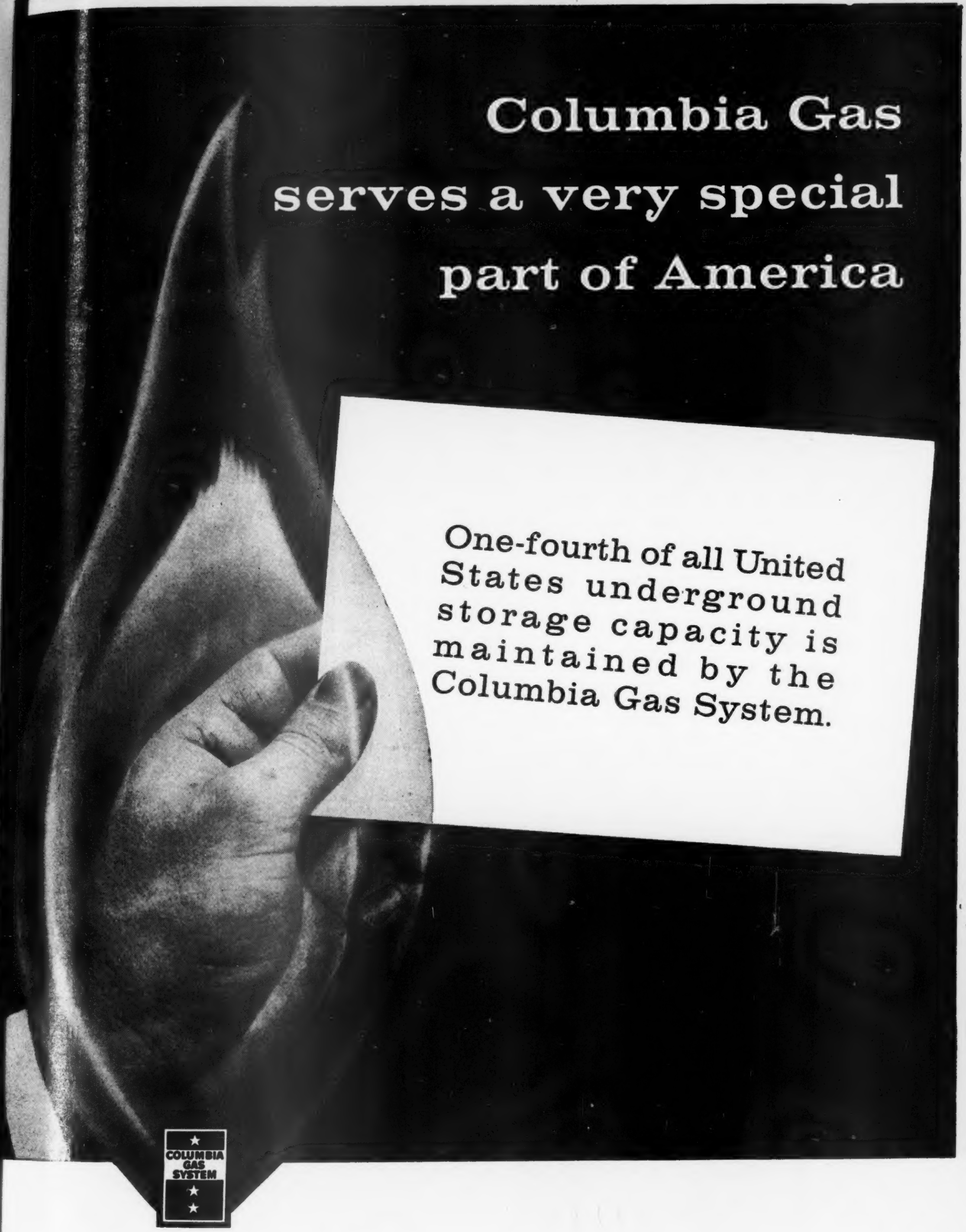
CHARLES F. PHILLIPS, JR.

ARNOLD H. HIRSCH

commissions do not enjoy much popularity and face an uncertain future. But, actually, when we dig beneath the surface of criticism and charges of shortcomings, we can see quite an opposite conclusion emerging in one form or another in all these reports and studies. That is, that there should be more regulation rather than less. Certainly that is true of Mr. Landis' report.

Statutory powers, duties, and jurisdiction of the regulatory commissions may be changed in form but no influential source has yet suggested doing away with the commissions along the lines, for example, proposed by Louis J. Hector, former Civil Aeronautics Board member who resigned a year ago and sent a long memorandum to President Eisenhower. It will be recalled that Mr. Hector told the President at that time that even the founding fathers could not have made the commissions, as presently constituted, effective instruments. He was all for taking policy-making functions away from the commissions entirely and handing them over to the executive branch.

The Landis report, which goes about as far as any of the reports filed in Wash-



roughout its service territory—in Ohio, nsylvania, West Virginia, Kentucky, ginia, Maryland and southern New k—natural gas continues to be the *ferred fuel* for home and industry.

THE COLUMBIA Gas SYSTEM, INC.

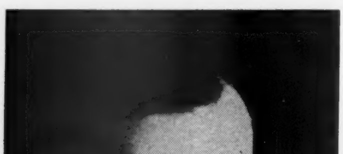
COLUMBIA GAS SYSTEM SERVICE CORPORATION
COLUMBIA HYDROCARBON CORPORATION
120 EAST 41st STREET, NEW YORK 17, N. Y.

CHARLESTON GROUP: UNITED FUEL GAS COMPANY, 1700 MacCORKLE AVENUE, S.E., CHARLESTON, WEST VIRGINIA. **COLUMBUS GROUP:** THE OHIO FUEL GAS COMPANY, 99 NORTH FRONT ST., COLUMBUS 15, OHIO. **PITTSBURGH GROUP:** THE MANUFACTURERS LIGHT AND HEAT COMPANY, 800 UNION TRUST BLDG., PITTSBURGH 19, PA.

ington, rejects any such division of functions and says that the integrity and independence of the regulatory agencies must be preserved. It can, and probably will be, contended that the Landis report is somewhat contradictory in this respect inasmuch as it calls for agency independence on the one hand while at the same time proposing presidential leadership through a new White House office for the oversight of regulatory agencies.

BUT, in any event, it should be clear by this time that the federal regulatory commissions are here to stay. They may be consolidated (as proposed for the Interstate Commerce Commission and Civil Aeronautics Board) or bisected (as proposed for the Federal Power Commission). But when the smoke of controversy clears away it is clear that they will at least be in business—and probably at the same old stands around Washington. If anything, the recent spate of studies and recommendations has given rise to some fears that a few proposals might result in regulation for regulation's sake, or more regulation than is actually needed. Of that, Congress must be the judge.

THE first article in this issue is in the form of a brief analysis of the Landis report by CHARLES F. PHILLIPS, JR., assistant professor at Washington and Lee University. PROFESSOR PHILLIPS is a native of New York state and was educated at the University of New Hampshire (AB, cum laude, '56, Phi Beta Kappa) and Harvard University (PhD, '60). His current teaching duties include government, business, utilities, and transportation.



JOHN O. GUNN

* * * *

THE article on "Earnings-price Ratios and the Current Cost of Common Equity," which begins on page 225, comes to us from an author who has represented consumers or so-called "public interest," almost exclusively in rate cases during the past thirty years. He is ARNOLD H. HIRSCH, civil engineering graduate of the University of Pennsylvania, who also studied law at Temple University and was admitted to the Philadelphia bar. During the past three decades he has specialized in the engineering, legal, and economic aspects of utility rates and regulation both in the United States and Canada, and has been consultant to regulatory commissions, municipalities, and private ratepayers. He was utility adviser to the late Governor Pinchot of Pennsylvania from 1931 to 1935 and during the World War II period served as chief of the public utilities division of the Office of Price Administration. He makes his home in Washington, D. C.

* * * *

JOHN O. GUNN, whose article on "Public Relations in the Field" begins on page 239, is a vice president of Bozell & Jacobs, Inc., and director of that firm's newly established investor-owned utilities service division. MR. GUNN has served as an accountant for eight major utility clients and is director of special projects for the Electric Companies Public Information Program. He joined his present firm in 1956 after seven years' service with the Cleveland Electric Illuminating Company. He is a Princeton graduate ('42, cum laude) and a former newspaperman.

THE next number of this magazine will be out March 2nd.

The Editors

Coming in the Next Issue...

(MARCH 2, 1961, ISSUE)

MUNICIPAL GAS PLANT SELLS OUT

When a municipally owned gas utility in a progressive small city of 11,000 faces bankruptcy after only three years of operation and must be replaced by an investor-owned company, the situation commands attention not only of the gas industry but other utility industries and their regulators. Robert C. Hayes, professional writer of Mercer Island, Washington, has written an account of a recent election in the city of Moses Lake, Washington, which went into the gas utility business in 1957. The vote was overwhelming to sell, but the reasons which led up to the inevitable are contained in this blow-by-blow description of what went wrong and why in Moses Lake.

WHY NOT START DOWNTOWN ON URBAN RENEWAL?

Urban renewal has become a leading issue, as well as controversial conversation piece, in the year 1961. At the various levels of government—federal, state, county, and local—blueprints are being drawn and plans are being discussed for reclaiming downtown areas which have become blighted by the cancerous growth of slums and economic deterioration. Naturally, public utilities of all kinds, as well as merchants and other nonutility businessmen of all kinds, are interested in what will happen to our "downtown" areas. Should they pull up stakes and follow the pell-mell flight to the suburbs or see what can be done about rejuvenating the once prosperous central districts commercially, residentially, and otherwise? James H. Collins, Washington, D. C., business writer, has concentrated on the problem of bringing shoppers back to the big stores downtown and how utilities have an important part to play.

A FORWARD LOOK AT FARM ELECTRIFICATION

The American farm land has had a surplus of about everything but rural electrification. Is it in danger of having a surplus of that service also? Not if suitable plans are made for education and utilization of rural electrification services which are rapidly being brought into existence by the electric utility industry as well as the electric co-operatives. Virgil Marvin, rural sales manager of The Toledo Edison Company, has written about the great future which lies in store for farm electrification, notwithstanding various changes which are rapidly taking place in American agriculture. Although the number of farms and farmers is declining, those remaining in operation will be larger units with larger power demands featuring various specialized power needs.

AND IN ADDITION . . . Special financial news, digests, and interpretations of court and commission decisions, general news happenings, reviews, Washington gossip, and other features of interest to public utility regulators, companies, executives, financial experts, employees, investors, and others.

Remarkable Remarks

"There never was in the world two opinions alike."
—MONTAIGNE

WOODROW WILSON

"I am not afraid of a knave. I am afraid of a rascal. I am afraid of a strong man who is wrong, and whose wrong thinking can be impressed upon other persons by his own force of character and force of speech."

LELAND HAYWARD
Theater and motion picture producer.

"If we can produce the entertainment people are willing to buy, and I have no doubt we can, subscription television will give us the largest number of box office customers the entertainment industry has ever had."

EDITORIAL STATEMENT
The Wall Street Journal.

"The truth is that money is not a substitute for brains, for skillful diplomacy, for sound military strategy, More money does not equal better government. And if Washington thinks money is an answer to complexity at home or abroad, then more money will equal worse government."

ROBERT S. MACFARLANE
President, Northern Pacific Railway Company.

"Regulatory restrictions contained in both state and federal legislation, enacted in horse-and-buggy days when the railroads had a virtual monopoly of transportation, have made it extremely difficult, if not impossible, for railroad managements to adjust and adapt their business and operations to modern conditions."

PHILIP A. HOLLAR
Vice president, Association of American Railroads.

"In stimulating rapid growth of air, road, and river hauling, government policies have created an oversupply of transport capacity, depressing railroad earnings to a bare subsistence level. These stacked policies have promoted rampant waste. They have stimulated and overbuilt the most inefficient carriers at the direct expense of the most efficient general carrier of all—the railroads."

FREDERICK R. KAPPEL
President, American Telephone and Telegraph Company.

"We must grow as a business that is regarded as alert, efficient, and always up to date. We must grow as a business that knows how to make improvements in service pay. We must grow as a business that can meet competition wherever it may develop. We must grow as a business in which ideals of service and marketing talent and zest for discovery all meet and mingle and strengthen each other."

WAYNE A. JOHNSTON
President, Illinois Central Railroad Company.

"It is my firm opinion that the competitive balance between the different modes of transportation should be determined by the free play of competition, in which each form of transportation should be allowed to exercise its cost or other inherent advantage, provided the rates are reasonably compensatory and do not discriminate among shippers. Competitive balance ought to be just what the term signifies—the product of competition—not regulation."

Utilities Events Calendar

CHECK THESE DATES:

Feb. 16-17—American Public Power Association will hold engineering and operations workshop, Colorado Springs, Colo.

Feb. 16-17—Missouri Valley Electric Association will hold industrial commercial sales conference, Kansas City, Mo.

Feb. 16-17—Pennsylvania Electric Association, Taxation Committee, will hold meeting, Philadelphia, Pa.

Feb. 16-17—Southeastern Electric Exchange, Accident Prevention Committee, will hold meeting, Biloxi, Miss.

Feb. 16-19—Edison Electric Institute will hold national conference of electric and gas utility accountants, St. Louis, Mo.

Feb. 17-19—National Association of Women Lawyers will hold midyear meeting, Chicago, Ill.

Feb. 19-22—Minnesota Telephone Association will hold annual convention, Minneapolis, Minn.

Feb. 19-22—Upper Midwest Electrical Industry Convention will be held, Minneapolis, Minn.

Feb. 20-21—Pennsylvania Electric Association, System Planning Committee, will hold meeting, Philadelphia, Pa.

Feb. 22-23—Annual Conference of Presidents of State Broadcaster Associations will hold meeting, Washington, D. C.

Feb. 23-24 — American Gas Association-Pacific Coast Gas Association will hold public relations workshop, Portland, Ore.

Feb. 23-24—Pennsylvania Electric Association, Relay Committee, will hold meeting, Pittsburgh, Pa.

Feb. 23-25—National Wiring Bureau will hold annual national wiring sales conference, Chicago, Ill.

Mar. 2-3—Public Utilities Seventh Annual Marketing Seminar will be held, Houston, Tex.

Mar. 2-3—Southern Gas Association will hold transmission management conference, Dallas, Tex.

Mar. 5-7—Southern Safety Conference and Exposition will be held, Atlanta, Ga.

Mar. 5-8—Third Annual Lighting Exposition will be held, New York, N. Y.

Mar. 5-9—American Society of Mechanical Engineers will hold annual gas turbine conference, Washington, D. C.

Mar. 7—Kentucky Telephone Association will hold annual convention, Lexington, Ky.

Mar. 8—Gas Appliance Engineers Society of the Midwest Chapter will hold meeting, Chicago Heights, Ill.

Mar. 9-10—AIEE, IAS, and IRE will hold second symposium on engineering aspects of magnetohydrodynamics, University of Pennsylvania, Philadelphia, Pa.

Mar. 12-14—Texas Telephone Association will hold annual convention, Houston, Tex.

Mar. 13-17—National Association of Corrosion Engineers will hold annual conference and corrosion show, Buffalo, N. Y.

Mar. 16-17—Edison Electric Institute, Industrial Relations Committee, will hold meeting, Washington, D. C.

Mar. 16-17—New England Gas Association will hold annual meeting, Boston, Mass.

Mar. 16-17—Oklahoma Utilities Association will hold annual meeting, Tulsa, Okla.

Mar. 16-17—Southern Gas Association will hold distribution and accounting management conferences, Atlanta, Ga.

Mar. 19-22—Edison Electric Institute, Meter and Service Committee, will hold meeting, Cincinnati, Ohio.

Mar. 20-22 — American Gas Association, General Management Section, will hold annual conference, Charleston, S. C.

Mar. 21-23—American Power Conference will be held, Chicago, Ill.

Courtesy, Westinghouse, Atomic Power Division

First Atomic Refueling at Shippingport

The first fueling of Shippingport's atomic reactor produced 388 million kilowatt-hours of electrical energy—equivalent to the energy obtained from burning 170,000 tons of coal. This first refueling picture shows the 50-ton steel reactor plant container dome which is 19

Public Utilities
FORTNIGHTLY

VOLUME 67 FEBRUARY 16, 1961 NUMBER 4

The Landis Report: Boon or Bane?

By CHARLES F. PHILLIPS, JR.*

The report is called disappointing. The analysis of regulatory agency faults is deemed incisive, but recommendations for rectifying them weak and ineffectual. Objectionable is the idea of tampering with the agencies' independence through presidential control by way of an Overseer or czar. Less, not more, bureaucracy and political interference must be had to improve regulation, the author believes.

DURING the past few months, several reports have been made on the problems currently facing the country's independent regulatory commissions—reports by both private and government agencies. Perhaps none was so long-awaited nor more publicized than the recent one presented to President-elect Kennedy by James M. Landis. Now that the 87-page report has been made public, I suspect that it will be received with much apprehension.

This report is of particular significance. Mr. Landis has had many years of first-hand experience with the regulatory agencies, having served as a member of the Federal Trade Commission, Securities and Exchange Commission chairman, and Civil Aeronautics Board chairman. In addition, he recently accepted a temporary position in the new administration as White House assistant to oversee the regulatory agencies. His criticisms and recommendations are, therefore, of special interest to all concerned with regulatory problems.

The Landis report raises two questions:

*Assistant professor of economics, School of Commerce and Administration, Washington and Lee University, Lexington, Virginia. For additional personal note, see "Pages with the Editors."

What is wrong with regulation? How can regulation be improved? One other question must also be asked; namely, will these recommendations improve the efficiency of our regulatory commissions and the climate within which regulated industries must operate? This article is intended as a summary and evaluation of the Landis report.

Regulatory Problems

THE gist of the regulatory problems as outlined by Mr. Landis is that our agencies can no longer claim to provide expert, speedy, low-cost regulation. On the contrary, they are entangled in red tape, beset by lobbyists, tainted with scandal, and are years behind in their decisions. The blame for this situation, according to the report, lies with the lack of administrative leadership, a "deterioration" in the quality of personnel, and a total lack of co-ordination among the various agencies.

Mr. Landis discusses each major agency in turn and finds much to be desired. The Civil Aeronautics Board, Federal Communications Commission, Federal Power Commission, and Interstate Commerce Commission are particular targets. Among the complaints:

Civil Aeronautics Board is so bogged down in "wasteful" procedures that it takes an average of thirty-two months to get a case decided. In addition, the outcome of cases appears to be determined by "the intrusion of influences off the record."

Federal Communications Commission has "drifted, vacillated, and stalled in almost every major area," continues to use "Alice-in-Wonderland procedures," and "seems incapable of policy planning." Evidence indicates that this commission, more than any other, "has been susceptible to ex parte presentations, and that it has been subservient, far too subservient, to the subcommittees on communications of the Congress and their members," not to mention "far too great an influence" by the networks.

FEDERAL POWER COMMISSION "represents the outstanding example in the federal government of the breakdown of the administrative process." The "patent failure" of the commission "to execute the laws relating to natural gas production" is of urgent concern. (According to a recent estimate, it would take the FPC, under present procedures, until A. D. 2043 to catch up with its work, even if the staff were tripled in size.) Mr. Landis adds: "Whether such failure adequately to perform a statutory duty would be 'cause' for removal is a question as to which lawyers might argue but which from the practical governmental standpoint permits of only one answer."

Interstate Commerce Commission "lacks positive direction because of the absence of the position of a chairman who is other than a presiding officer." Moreover, opinions of the commission "are presently in the poorest category of all administrative agency opinions. Their source is unknown and the practice has grown up of parsimony in discussing the applicable law in making a determination."

Other examples could be given from the report but they all lead to one conclusion: Delay and an absence of purpose have infected our regulatory agencies.

Landis Explains Why

THERE are three major explanations for this situation offered by Mr. Landis. First, there has been an absence of administrative leadership. During the last decade "the Executive appears to have had no real concern" with the operations of the agencies. More specifically, with respect to the awarding of overseas air-line routes "lobbying in its worse sense" has been prevalent since 1948 around mystery-shrouded approaches to the White House. In this field, the report adds, there has been a notable lack of presidential self-restraint in avoiding outside influences. The rôle of presidential leadership is heavily emphasized. Mr. Landis feels that the President "has the constitutional duty to see that the laws are faithfully executed, and this duty is applicable to the execution of laws entrusted to regulatory agencies, whether technically 'independent' or not."

Second, there has been a "deterioration" in agency personnel, both in the staff and in the commission heads. "Top administrative positions appear to have been sought frequently as steppingstones to further political preference or to positions of importance within the industries subject to regulation." Qualified men within the agencies have been passed over for unqualified outsiders in appointments.

ARGUING that many of the commissions "have neglected their planning functions," Mr. Landis adds: "The real issue is not whether the planning function should be delegated to an executive or to a commission but whether the individuals entrusted with such a responsibility have the capacity and the time with which to discharge it." Nor has the "ethical conduct" problem been solved.

Third, there is a total lack of co-ordination within and among the various agencies. Within agencies there has been little attention paid to "policy formulation" and, especially, "in the planning of foreseeable problems." Among agencies, "the few interagency committees that have been set up have accomplished too little in conducting their separate approaches to a common problem." While there are many areas calling for well-co-ordinated attacks upon common problems, emphasis is placed upon the fields of transportation, communications, and energy. Urgent attention, Mr. Landis argues, should be directed to the development of a national transportation policy.

Recommendations

THE report makes many specific recommendations to improve our regulatory commissions, some applying to all of the agencies and some limited to individual agencies. The major recommendations for all of the agencies are as follows:

Congress should give the President power to reorganize any of the regulatory agencies, subject only to a veto by a concurrent resolution of both houses of Congress. This power should be granted for a minimum of two years but preferably for four years.

Using this power, the President should stipulate that he designate the chairman of all agencies and that their tenure is at his pleasure. In turn the chairman should have greater authority to hire personnel and in handling the agency budgets. It is proposed that the terms of office be increased to ten years and the chairmen be given an "entertainment allowance" to free them from possible influence from organizations under their jurisdiction, as well as an "adequate retirement allowance."

A reorganization plan should be drafted to permit the agencies to openly delegate decisions to single members, panels, or staff examiners, with review by the agency heads only at their discretion. A judicious use of selective review, and an insistence on brief petitions for certiorari by counsel, would cut down the business demanding attention at the commission level.

There should be created within the President's Executive Office three offices, one each for the co-ordination and development of transportation, communications, and energy policies. No new regulatory powers would be granted to these proposed offices. "Operations for the moment can be left to the existing agencies, whose conduct should in the light of these recommendations show marked improvements. If experience later would dictate the desirability of the consolidation of certain operating functions, they will then have become sufficiently identified and understood to enable their intelligent consolidation in an appropriate departmental structure."

There should be established within the Executive Office an office to oversee regulatory agencies. This office should not be "a mere inspector general," but should be a source of "creative activity." The office would watch such matters as regulatory delay and the failure to implement statutory policies; in short, to step up the handling of cases and decisions.

A Solution?

No one is likely to disagree with the report's conclusions regarding current regulatory problems. While some agencies may feel that they have been criticized unjustly in particular cases, delay, red tape, and confusion have been recognized in countless reports on regulatory agencies in the past few years. These criticisms are rightly deserved and should receive immediate attention. Action by Congress and the agencies themselves on the recommendations made by the Landis report concerning these matters are long overdue. There is, therefore, little opposition to such proposals as: increasing the powers of examiners, increasing the budgets, extending the terms of members and increasing the administrative authority of chairmen, continuing the administrative advisory conference on procedures, and cutting down on procedural bottlenecks.

When we turn to the other major recommendations of the report, however,

one is skeptical. Mr. Landis urges more executive control over the agencies and the creation of four new agencies: three to co-ordinate policy in the areas of transportation, communications, and energy, and the fourth to oversee all the regulatory agencies. In short, the "independent" commissions are to be made less independent.

As no new regulatory powers are suggested for these new offices, a question arises as to how they would get the co-operation of present agencies. But a more important problem, well stated recently by *The New York Times*, is also presented:

> The question arises whether there is something incompatible in this situation, for if the President exercises strict control over the agencies, will he be able to get the kind of men Dean Landis is looking for; but if the power rests with strong commissions, will the President be able to exercise control?

Clearly, there can be no argument with the recommendation that the President should appoint qualified personnel to the respective commissions. Nor should the suggestion of the establishment of a permanent "Office for the Oversight of Regulatory Agencies" be taken lightly. Many questions and problems are raised, of course, by such a recommendation. Mr. Landis has clearly stated that the rôle of the "Overseer" is not to compromise the essential independence of current agencies, but to step up the handling of cases and decisions. If this could be assured, by carefully defining the purposes and limits of the office *before* it is established, there would be little opposition. Moreover, this office would presumably make annual recommendations to Congress concerning regulatory problems. (From a practical standpoint there may well be considerable differences of opinion as to whether such an office should represent the Executive or the legislature. Chairman Oren Harris, when asked to comment on the Landis proposals, replied that

"these agencies should not in any way be subservient to the White House or anyone else.")

Agency Independence Should Continue

PRESIDENTIAL control, however, seems unwise. Beginning with the ICC, Congress has deliberately insulated our agencies from such control. Congress will certainly take a dim view of any effort to tamper with the independent status of these agencies. Independence has drawbacks, to be sure, but it also has important advantages. Our agencies regulate the affairs of perhaps the most powerful economic groups in our society. As a noted authority recently stated,

> Federal regulation of business remains an issue on which Americans divide. And the powers given the commissioners inevitably provoke the institutional jealousies of Congress, the President, and the federal courts.

Independence seeks to assure that these agencies are in part insulated from these pressures. As our own experience has shown, successful regulation requires this freedom. For years, students of antitrust policy have pointed out that too much political influence has been evident, preventing the development of a consistent, continuous, and comprehensive policy. Congressional control is no improvement—the commissions often have followed the political situation when Congress itself either has framed a basic statute to favor one segment of an industry or has failed to provide clear authority to regulate. Making the agencies more political—less independent—will not be in the public interest.

Why Add Confusion?

MOREOVER, the creation of three new agencies to co-ordinate policies will not solve, but will add more confusion to, current regulatory problems. This is not to suggest that policy co-ordination is unneeded or unnecessary. On the contrary, the United States urgently needs a national transportation policy. But if we have learned anything from past experience, it is that too much regulation has prevented such a goal from being achieved. It is the maze of regulatory bureaucracy that, in large part, has brought on the present confusion and chaos. In other words, instead of building up more bureaucratic layers à la "Parkinson's first law," we should be trying to "clear away a lot of deadwood." Proposals for new regulators to regulate the regulators do not offer hope that deadwood will be eliminated.

Opposition to new agencies rests upon two other considerations as well. First, even if the long-range plan is to consolidate the agencies (as Mr. Landis seems to be saying it is), this would appear to be the wrong approach. It is always far easier to add a new agency than to destroy an old one. From a political standpoint, once an agency becomes established and vested interests are built up, dissolution is difficult indeed. I fear, therefore, that consolidation may be only a blueprint which will collect dust.

SECOND, new agencies may well make regulation even more complicated and confusing for the industries involved. For example, suppose that a policy conflict developed between the proposed transportation co-ordination agency and

one or more of the present transportation commissions. Would not delay be increased, with the industry involved caught in the middle? Should such a situation develop, regulatory efficiency would diminish.

If the problem is a lack of co-ordination, could not this be one of the functions of the proposed "Overseer"? This official, working with the appropriate congressional committees and industry representatives, should be able to re-examine our regulatory agencies and to propose necessary changes. Moreover, rather than increase Executive control over our agencies, it might be advisable to abandon the multicommissioner system in favor of a single, responsible director for each agency.

Whatever the merits of these suggestions might be, there is one unanswered problem raised by the Landis report.

An Unanswered Problem

Most of the recommendations found in the Landis report are indeed arguable. Perhaps of even more importance than what the report says, however, is what it does not say. Here, I think, is the serious weakness. More basic questions must be asked, one of which is whether there is too much regulation in general and of the wrong kind. Specifically, regulation is not only a legal problem, it is also an economic one. The latter seems to have been forgotten for too many years.

The six major regulatory agencies were created in response to particular problems, and often abuses, of earlier days. Thus the ICC was established in 1887 to deal with the then-apparent railroad monopoly problem; the FPC in 1920 to control the construction and operation of hydroelectric projects on navigable streams. Clearly, however, economic conditions today are vastly different from what they were seventy, fifty, thirty, or even ten years ago. The problems have changed, too.

In a recent article in the Fortnightly,[1] I argued that although public utilities are monopolies in the legal sense, they are not free from competition in the business sense. Virtually all utilities have increasing direct competition with other products, as well as indirect competition for the consumer's dollar. Under today's cumbersome and outdated type of regulation, utilities find it most difficult to adjust to changing economic conditions. The solution to the economic problem of regulation is not the adding of a new group of agencies to oversee the present commissions. Some regulation may be necessary, but this does not imply that extensive regulation is necessary.

To continue to regulate the railroad industry as a natural monopoly, for example, is detrimental to the entire economy. Regulation should serve only to protect the public where monopoly or destructive competition remains. As the Muller Report on Federal Transportation Policy and Program recently stated,

> This approach requires greater freedom for the carriers in setting their own rates and determining and developing their routes and services. The tighter regulation that was well adapted to protecting the public under the pre-

[1] "Regulation in a Competitive Economy," by Charles F. Phillips, Jr., Public Utilities Fortnightly, November 24, 1960, Vol. 66, No. 11, p. 793.

dominant monopoly of the railroads is no longer well suited to highly competitive transport networks. Common carrier rates of all kinds are rapidly becoming regulated by competition whether the common carriers like it or not—the competition of highly developed private and exempt carriers.

With planning and proper transportation co-ordination, workable results seem possible under substantially *reduced* regulation.

The Landis report is much too vague on the economic problems of current regulatory policy. These problems are as important, if not more so, as the legal problems so well discussed in the report. To be sure, a start to improve regulatory efficiency must be made some place and there is much to be done. And the report, it must be pointed out, does recommend that the major duty of the proposed new agencies would be to study carefully these economic problems. But unless the purposes and goals of regulation are clearly outlined at the beginning, the complexities of present policies may be compounded.

Conclusions

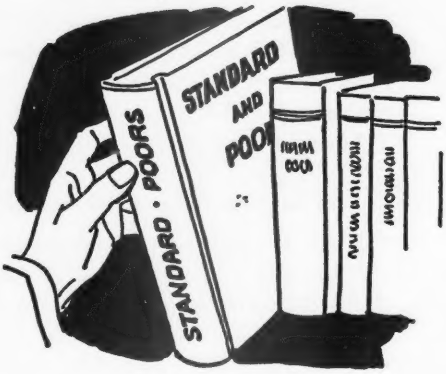
THE Landis report, at best, is disappointing. Regulatory delay, cumbersome procedures, a deterioration in personnel are serious and pressing problems of our regulatory agencies. Such problems must receive urgent attention if the regulatory climate is to be improved. But when one turns to Mr. Landis' recommendations for solving these problems, one must be apprehensive. The major problem is not one of a lack of regulatory agencies; the problem is too much regulation and, in many cases, regulation on the basis of outdated economic premises. Rather than building up bureaucratic layers, we need to re-examine the purpose of regulation.

Regulation is a poor substitute for competition. It is inherently slower because it must satisfy the requirements of due process: investigate, give notice, hold hearings, study the record, make findings, issue orders, permit appeals. At the same time, regulation often supplants the judgment of an agency for that of utility management—and of the market. Such a situation often leads to an agency becoming, in effect, the "board of directors" for the companies under its control.

For these reasons, regulation is both difficult and complex. Regulatory agencies must recognize, therefore, that competitive conditions are continuously changing. Regulation must be up to date. Too much regulation, and regulation of the wrong kind, combined with the inherent difficulties, can be damaging to the public interest. Unless these problems are dealt with first, the hope of improving regulation will be dim.

IN summing up my reaction to the Landis report, I would say that it is a careful analysis of current regulatory problems which minimizes certain important recent developments in the competitive relationships of regulated industries and which ignores an opportunity to make a real contribution in areas where public policy has lagged for too long. Less, not more, bureaucracy and political interference must be the starting point if regulation in the United States is to be improved.

Earnings-price Ratios and the Current Cost of Common Equity



By ARNOLD H. HIRSCH*

The stock market's erratic course and its attendant distortion of earnings-price ratios in the utility business have made this traditional guide of many commissions an unreliable one in estimating the cost of common stock capital. Some regulatory bodies have become aware of this and have tried to improve their rate-making function by means of cushions and pragmatic adjustments. There is a danger that their adherence to earnings-price ratios as the ultimate bench mark of the cost of common equity may eventually deteriorate into regulation by ear.

EARNINGS-PRICE ratios, the traditional guide of many commissions in measuring the cost of common stock capital, seem to have foundered on the rocks of an erratic stock market. Their vitality has been impaired as a factor in the determination of a fair rate of return. Regulatory expertise is becoming increasingly hard pressed to restore their former cogency without inviting the danger of regulation by ear and its invidious implications. A preponderance of factual evidence indicates the need of supplemental criteria in order to protect the interests of both the investor and the consumer.

At the outset, it should be observed that earnings-price ratios have never been clothed with infallibility even by their zealous advocates, including the writer. If infallibility were a condition precedent to the valid adoption of any standard in fixing just and reasonable rates, the rate-making process would be paralyzed. Implicit in the fact that rate making is an art and not a science is the inexorable potential of infirmities, and regulatory agencies are constantly confronted with the choice of imperfect tools. Mr. Justice

*Public utility consultant, Washington, D. C. For additional personal note, see "Pages with the Editors."

Brandeis once noted that "it is much easier to reject formulas presented as being misleading than to find one apparently adequate."[1]

But despite their present-day vulnerability, earnings-price ratios, at least conceptually, provide a more reliable indication of the current cost of *attracting* common stock capital than any other single criterion. They mirror the investor's judgment and appraisal of common stock—a composite of many factors and diverse influences, both speculative and otherwise, which impinge upon the securities market. Many of the articulate opponents of this criterion undoubtedly have been less at war with the soundness of its concept than with its abusive implementation in some rate proceedings. The allowance for common equity must always be fair and equitable, and its imprudent determination can be prejudicial to either the investor or the consumer. Francis X. Welch, in his book titled *"Preparing for the Utility Rate Case,"*[2] aptly stated:

> It is ordinarily relatively simple to determine the cost of servicing borrowed money, which usually is represented by bonds. The fair cost of common stock or ownership capitai is more difficult to determine because the dividends that any particular corporation may pay to its stockholders are not fixed obligations, and it is therefore necessary to determine through some other criteria the amount of earnings needed to support a company's common stock equity. Only if such "equity" earnings are maintained at an adequate level can the corporation hope to obtain, at reasonable cost, on reasonable terms and in competition with other similar companies, the new money it needs for service expansion and betterment. This is what has been described as the maintenance of appropriate credit. It is essential to any healthy business.

The Past Clouds the Future

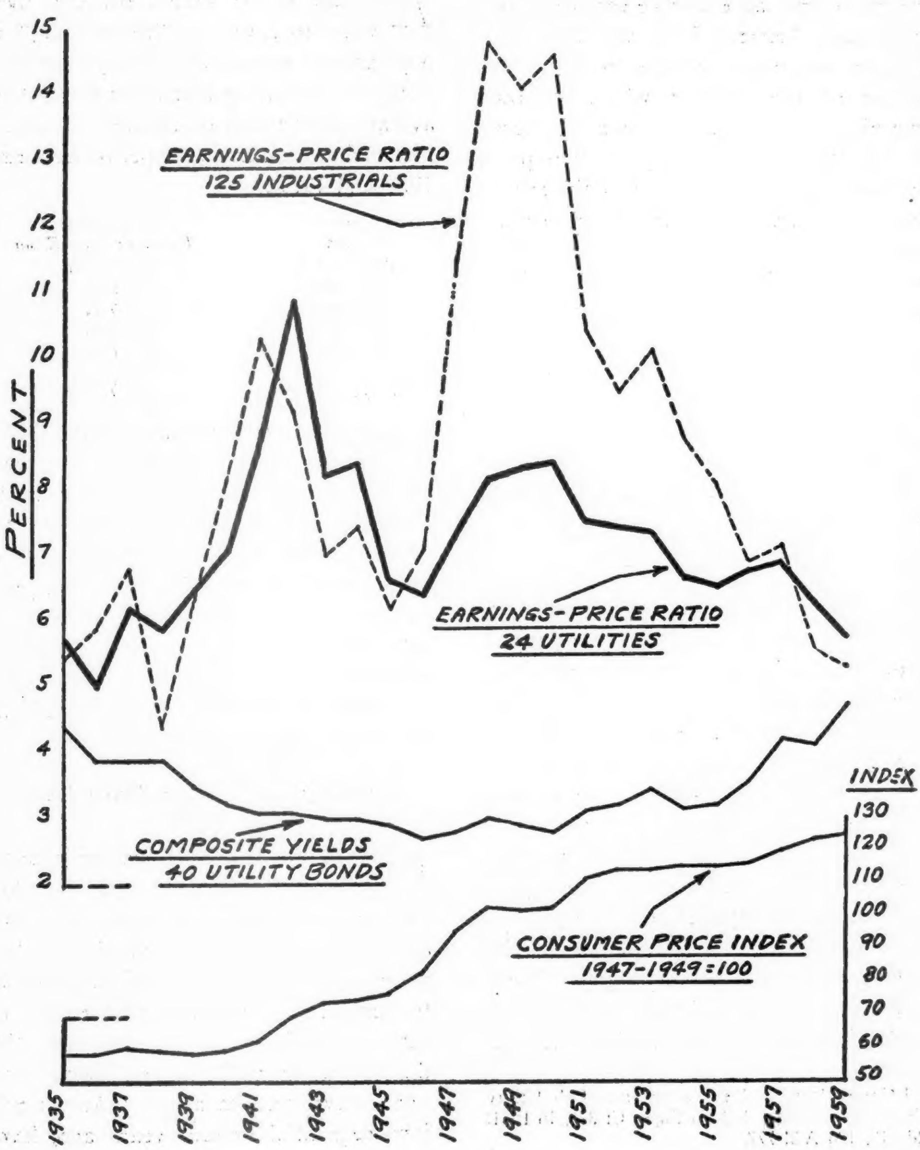
The determination of an equitable allowance for common equity in the foreseeable future poses a thorny problem, as graphically portrayed by the factual record of the past twenty-five years, from 1935 through 1959. During this period, many deep-rooted changes were spawned in our national economy, and the consequent imponderables which they have injected into the securities market have greatly complicated the proper evaluation of market data. Beginning with Figure 1, page 227, it will be seen that the earnings-price (E/P) ratios of Moody's 24 utilities and 125 industrials had completed a virtual circle between 1935 and 1959. The utilities opened the period with an average E/P ratio of 5.67 per cent and closed it with an E/P ratio of 5.76 per cent, reaching a high of 10.85 per cent in 1942 (during World War II) and a low of 4.99 per cent in 1936. The industrials began with an average E/P ratio of 5.45 per cent and ended with an E/P ratio of 5.28 per cent, with a high of 14.80 per cent in 1948 and a low of 4.40 per cent in 1938. The utilities had an average E/P ratio of 7.15 per cent during the 25-year period *versus* 8.44 per

[1] Quoted with approval in Colorado Interstate Gas Co. *v.* Federal Power Commission (1945) 324 US 581, 58 PUR NS 65.

[2] (1954), at page 257.

FIGURE I

MOODY'S BOND AND COMMON STOCK AVERAGES
CONSUMER PRICE INDEX



cent for the industrials. It is noteworthy that the industrials were conspicuously more volatile than the utilities.

THE conversion of the utility E/P ratios into an equitable cost of common equity between 1935 and 1959 affords a suggestive prelude to the complexity of the problem which is now emerging. It is probably unnecessary here to indicate the essentiality of two prerequisites, as a minimum: (1) the selection of reasonably comparable, or barometer, utilities; and (2) a representative test period for the analysis of the E/P ratios of these utilities. (In the interest of brevity and simplicity, consideration of the cost of flotation and market pressure has been expressly omitted.) For the purpose of this article, Moody's 24 utilities have been chosen as the barometer companies. With respect to the test period, the Pennsylvania superior court has enunciated the prevailing rule:[3]

> . . . Cost of capital is the determination of a percentage, based upon the factual evidence, of what it will cost a utility to obtain debt and equity capital. *The best evidence of this relates to the recent past* . . . The rate of return is determined to operate in the future. The market admittedly fluctuates constantly. The best evidence, if not the only reliable evidence for these purposes, is the experience of the past. A prediction of a future market in the guise of an exercise of judgment is unwarranted. The judgment embodied in the function of rate making, which is delegated legislative power, is not of this nature; it is a judgment to be exercised by the commission upon the facts presented. . . . (Emphasis added.)

ADOPTING a test period of, say, five years to cover the "recent past," a popular test period with many commissions, the following tabulation shows the average E/P ratios of Moody's 24 utilities during each five-year period between 1935 and 1959:

5-year Period	*Average Earnings-price Ratio*
1935-1939	5.85%
1940-1944	8.65
1945-1949	7.35
1950-1954	7.46
1955-1959	6.44
25-year Average	7.15%

In the above tabulation, it is patent that the average E/P ratio of 5.85 per cent during the five-year period of 1935 through 1939 is totally inadequate to provide a fair return on common equity during any of the succeeding five-year periods through 1959. And the average E/P ratio of 8.65 per cent during the period of 1940 through 1944 would seem to produce an excessive return in each of the ensuing five-year periods.

Formerly E/P Ratios Gave Good Results

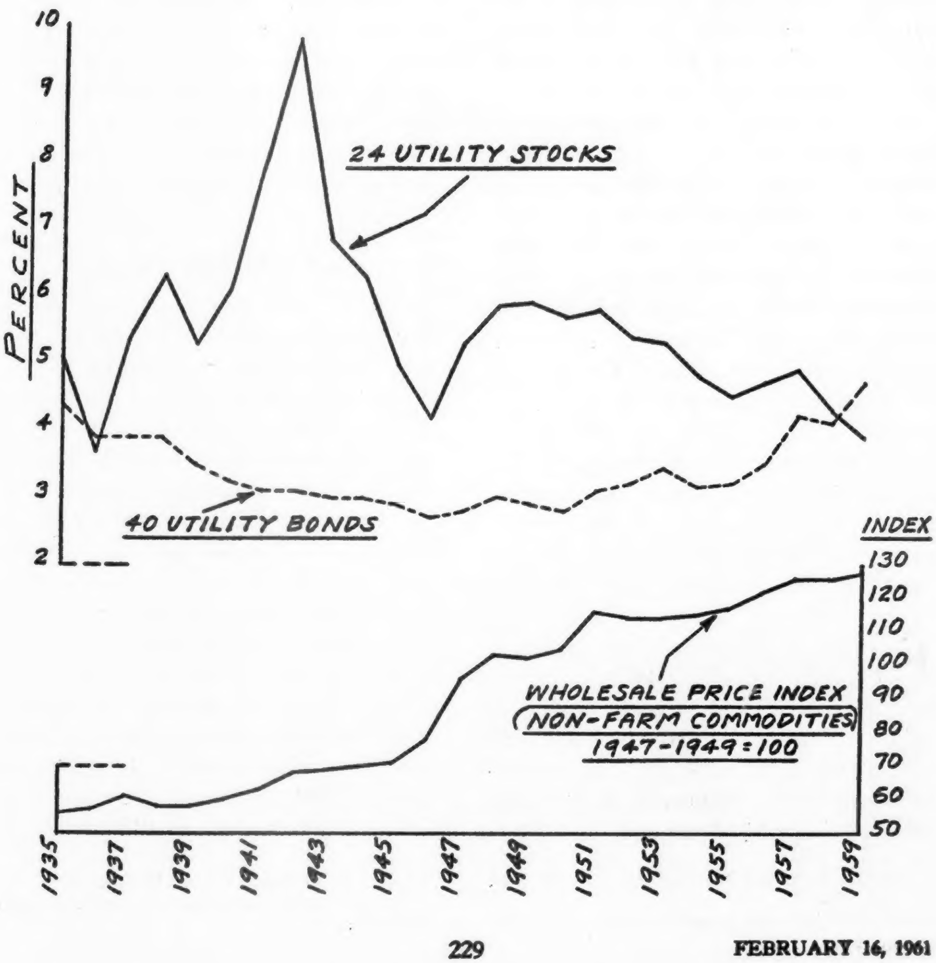
NOTWITHSTANDING factual evidence of this kind during the past twenty-five years, commissions generally have achieved commendable results through the use of E/P ratios alone, without recourse to recurrent, protracted, and expensive rate proceedings. Today, however, the difficulties are multiplying. Diverse economic developments, almost unknown and inconsequential several years ago, have

[3] City of Pittsburgh *v.* Pennsylvania Pub. Utility Commission (1956) 182 Pa Super Ct 376, 16 PUR 3d 319, 126 A2d 777.

FIGURE 2

MOODY'S AVERAGE YIELDS ON UTILITY BONDS AND COMMON STOCKS

WHOLESALE PRICE INDEX



recently conjoined and commenced to exert pressures in the stock market which have abnormally depressed the utility E/P ratios.

There are no signs that this situation will soon abate. Some of these developments are of a permanent character, such as the growing influx of new equity money. According to a study by the New York Stock Exchange, between 1950 and 1958 institutional investors had augmented their holdings of listed stocks from a market value of $9.5 billion to $45 billion, an increase of 374 per cent[4]; and their holdings in 1960 are estimated at $50 billion, or about 17 per cent of the value of the entire Exchange list.[5] Other developments are of a relatively temporary duration, such as the shift in investor preference from bonds to common stock as a hedge against inflation, and, in view of the national and international economic climate, the special attraction of utility shares as "defensive" securities, vis-à-vis industrials or rails. The accelerating technological revolution also is an impressive factor. More time must elapse before the present economic fog is dissipated. In the meantime, the integrity and decisive influence of E/P ratios in the determination of a fair return on common equity are being steadily undermined.

FIGURE 1 shows that, with the exception of the period of World War II, the most persistent and steepest decline in utility E/P ratios occurred between 1950 and 1959—from 8.39 per cent to 5.76 per cent. (The industrial E/P ratios dropped from 14.62 per cent in 1950 to 5.28 per cent in 1959.) On the other hand, the composite yields of Moody's 40 utility bonds[6] climbed from an average of 2.82 per cent in 1950 to 4.70 per cent in 1959, their highest level in twenty-five years.

It will be noted that, despite an advance of 112 per cent in the Consumer Price Index[7] during this 25-year period, no conclusive relationship is discernible between the cost of living and the returns realized by the investors on either bonds or common stock. It is possible, and even probable, that the concurrence of more potent economic factors in the securities market has obscured the impact of the dollar erosion. (The same observation is warranted with respect to the trend of the Wholesale Price Index in Figure 2, page 229.)

What Investors Want

INVESTORS in utility common stocks are fundamentally interested in their steady-income features. Dividend yields are important. Figure 2 shows the annual average yields on Moody's utility stocks and bonds between 1935 and 1959. During this 25-year period, the common stock yields averaged 5.53 per cent, or 2.14 percentage points above the average bond yield of 3.39 per cent. In light of the intrinsic differences between both types of securities, such a *positive* spread is within the range of normal expectation. During this period, the stock yields dipped below the bond yields only twice: in 1936, with a *negative* spread of 21 basis points, and in 1959, with a *negative* spread of 76 basis points. And in 1959, while the

[4] PUBLIC UTILITIES FORTNIGHTLY, June 18, 1959, at page 928.

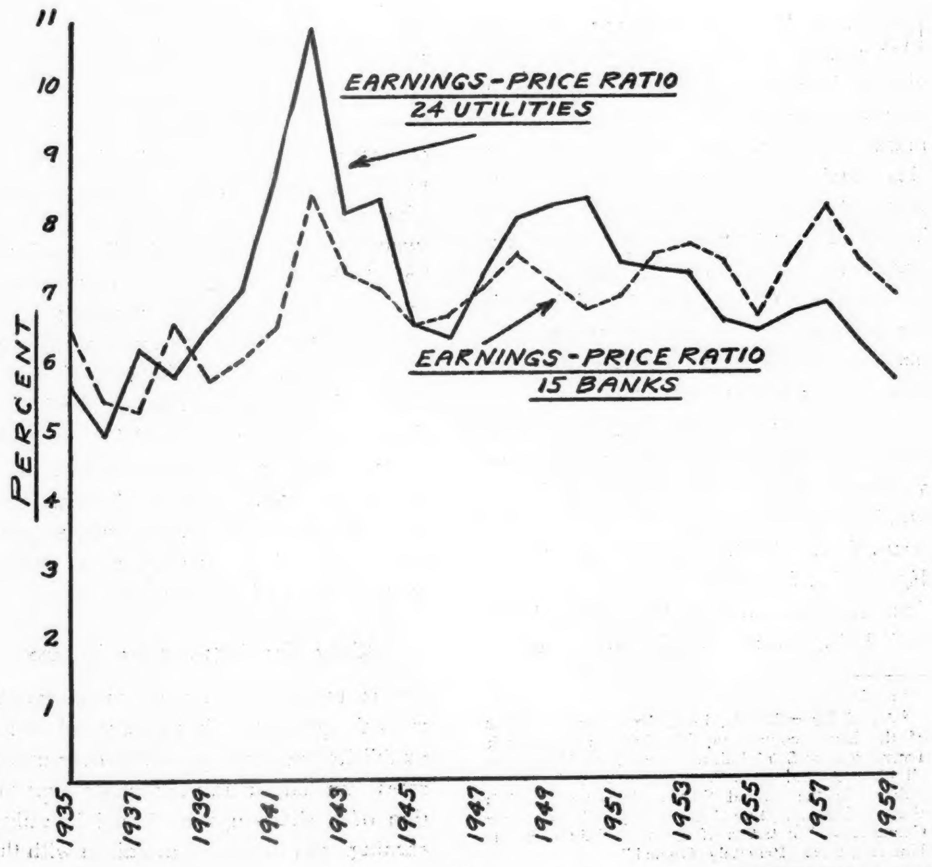
[5] *The Wall Street Journal*, December 28, 1960.

[6] 10 Aaa, 10 Aa, 10 A, and 10 Baa.

[7] U. S. Department of Labor, Bureau of Labor Statistics.

FIGURE 3

MOODY'S COMMON STOCK AVERAGES



average bond yield soared to a record high of 4.70 per cent, the average stock yield, with the exception of 1936, sank to its lowest level in a quarter of a century—3.94 per cent. Such an inverted pattern of behavior is plainly symptomatic of gross abnormalities in the market place.

It is apparent, in Figure 2, that the substantial rise of 130 per cent in the Wholesale Price Index (nonfarm commodities)[8] between 1935 and 1959 made no visible impression on the utility bond or stock yields.

Moody's 15 bank stock averages,[9] as shown in Figure 3, page 231, provide an interesting frame of reference in assessing the abnormalities in the stock market during the period in review. As a class, bank stocks are usually labeled "defensive" securities and rated a notch higher in investment quality than utility common stocks. During the 25-year period, the E/P ratios of Moody's bank stocks averaged 6.98 per cent *versus* 7.15 per cent for the 24 utilities and 8.44 per cent for the 125 industrials.

Parenthetically, such a statistical relationship tends to support the superior investment quality of the bank stocks. It will be seen that for seventeen consecutive years, from 1935 through 1951, the utility E/P ratios fell below the bank ratios on four occasions only: in 1935, 1936, 1938, and 1946, with a maximum spread of 0.87 percentage points in 1935. But during the next eight years from 1952 through 1959, the utility E/P ratios were continuously below those of the bank stocks, with a spread of 1.26 percentage points in 1959.

Dividend Yields and E/P Ratios

An examination of the individual components of the E/P ratios and dividend yields since the close of World War II reveals the bizarre character of the recent securities market. Figure 4, page 233, encompasses the 14-year period from 1946 through 1959. During this period, the earnings and dividends per share of Moody's utility stocks advanced 74.5 per cent and 82.5 per cent above their respective levels in 1946, with an average payout ratio of 70.5 per cent. The average market price of these stocks, however, after trailing desultorily during the first twelve years through 1957, suddenly bolted ahead of earnings and dividends in 1958 and 1959 for an overall gain of 94.8 per cent above the average price in 1946. More specifically, between 1957 and 1959, while earnings and dividends per share rose 12 per cent and 7.4 per cent, respectively, the average market price of the utility stocks jumped 34.3 per cent. Such a spectacular leap in market price can scarcely be construed as a normal manifestation of the securities market.

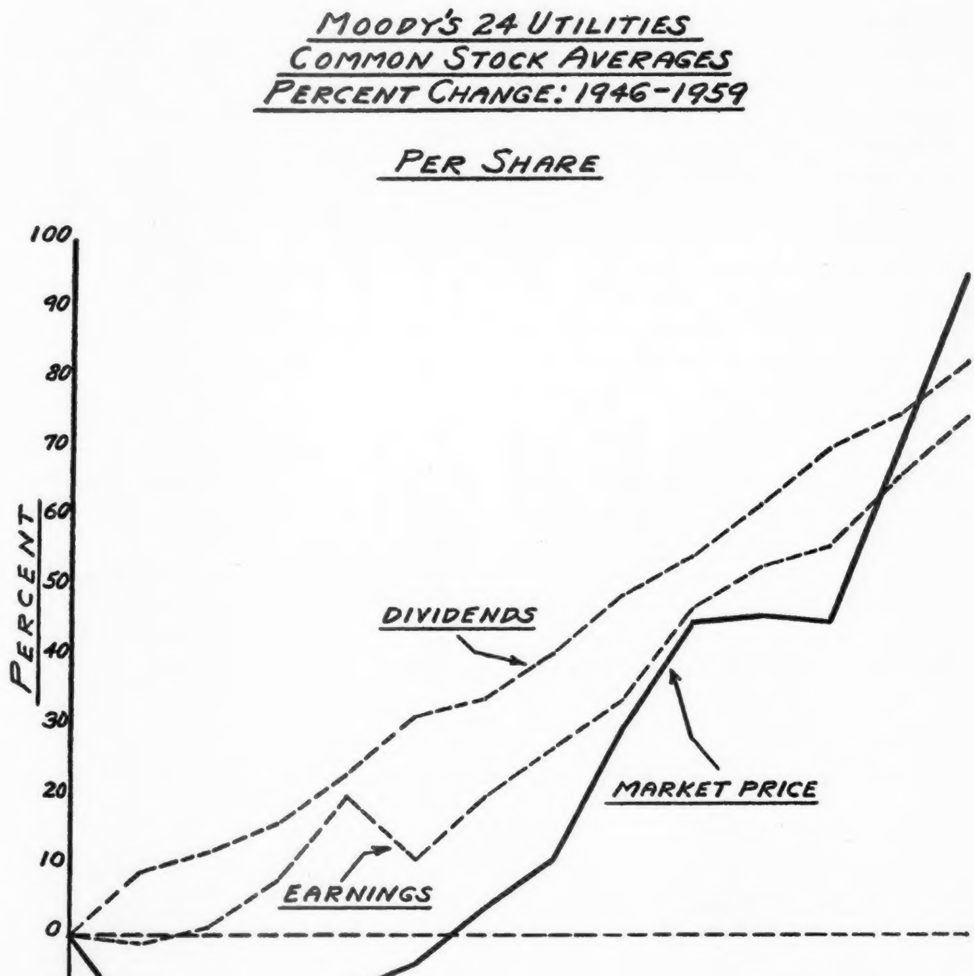
Utility Earnings and the Future

It is incredible that recent investors, with presumed knowledge of well-established regulatory control over utility rates, can harbor any legitimate expectation of a sharp upward trend in utility earnings and dividends in unison with the

[8] *Ibid.*

[9] As of December 31, 1959, the aggregate assets of the banks comprising Moody's common stock averages were $36.1 billion *versus* $42.2 billion for all class A and class B privately owned electric utilities in the United States. Sources: Moody's Bank & Finance Manual for 1960; Federal Power Commission "Statistics of Electric Utilities in the United States—Privately Owned."

FIGURE 4


MOODY'S 24 UTILITIES
COMMON STOCK AVERAGES
PERCENT CHANGE: 1946-1959
PER SHARE
PERCENT
100
90
80
70
60
50
40
30
20
10
0
-10
-20
DIVIDENDS
EARNINGS
MARKET PRICE
1946
1947
1948
1949
1950
1951
1952
1953
1954
1955
1956
1957
1958
1959

rise in market prices. A more rational cause of the current market phenomenon would seem to be the expanding imbalance between the mounting supply of new equity funds and the relative paucity of available common stocks of the more desirable variety, such as the utility equities.

This imbalance, accentuated by unprecedented national and international developments, has engendered what appears to be the "compulsive" buying of securities, where investors are motivated by necessity to seek a safe port in an economic storm. The prices paid for common stock under these circumstances must be treated with extreme caution, as they hardly provide the most trustworthy index in determining the cost of attracting new equity capital for rate-making purposes.

FIGURE 5, page 235, is designed to dispel any notion that the market prices of utility common stocks may have forged ahead recently under the impulse of their book value. Between 1946 and 1959, while the average book value per share of Moody's utility stocks rose 40.7 per cent, the average market price per share vaulted to 94.8 per cent above the level of 1946. It will be seen that, until the end of 1953, the book value advanced at a higher overall rate than the market price; thereafter, the market price overtook and outdistanced the book value each year through 1959. More prominently, between 1957 and 1959, while the book value per share crawled 6.3 per cent, the average market price darted to 34.3 per cent above the level of 1957. If there is any relationship between the recent market prices of utility common stocks and their book value, it is palpably meretricious.

Germane to any incisive analysis of the securities market is the pervasive and provocative factor of common stock turnover ratio: the relationship between the number of shares traded during the year and the average number listed. The tabulation below, for selected categories of common stock, is significant.

IN this tabulation, the average turnover ratio of Moody's utility stocks during the three-year period of 1957 through 1959 was 5.6 per cent, close

COMMON STOCK TURNOVER RATIO[a]

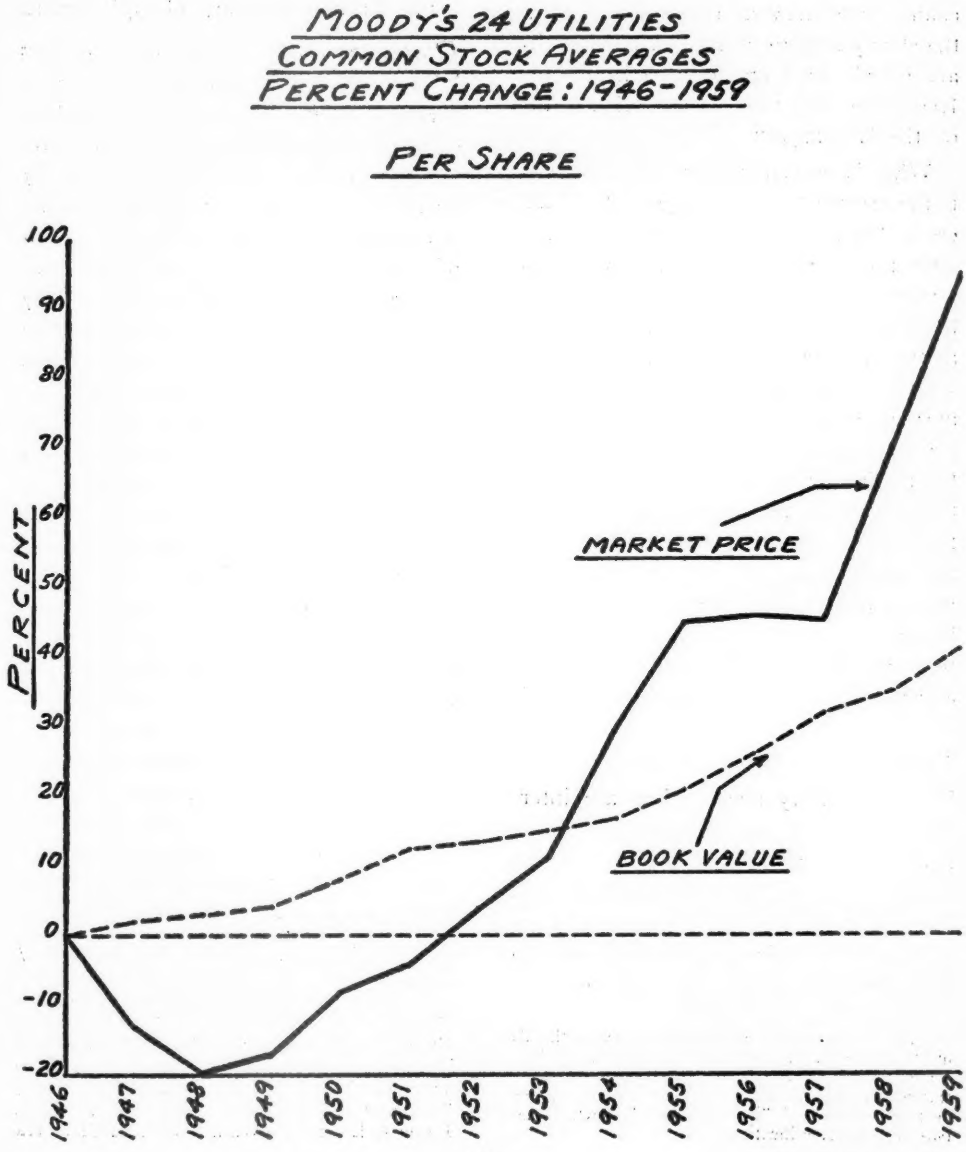
	1957	*1958*	*1959*
Moody's 24 Utilities:[b]			
Composite	5.4%	6.0%	5.4%
Range	3.2–10.5	3.0–11.6	2.6–11.6
Dow-Jones 15 Utilities:			
Composite	5.8	6.2	5.8
Range	3.2–10.5	3.0–9.3	2.6–11.4
New York Stock Exchange[c]	12	15	15

[a] Based on number of shares traded on New York and American Stock exchanges, as published annually by *The New York Times*. It should be noted that some of these stocks are traded also on local exchanges and "over-the-counter" markets.

[b] Includes minor adjustments for a few stock splits and for two stocks which are traded "over-the-counter" only.

[c] Source: *The Exchange*, dated March, 1959, and March, 1960, published by the New York Stock Exchange; includes all listed common and preferred stocks.

FIGURE 5


MOODY'S 24 UTILITIES
COMMON STOCK AVERAGES
PERCENT CHANGE: 1946-1959
PER SHARE
PERCENT
100
90
80
70
60
50
40
30
20
10
0
-10
-20
MARKET PRICE
BOOK VALUE
1946
1947
1948
1949
1950
1951
1952
1953
1954
1955
1956
1957
1958
1959

to the average of 5.9 per cent for the Dow-Jones utilities *versus* 14 per cent for all stocks listed on the New York Stock Exchange. The wide disparity in turnover ratios between the utility stocks and the total listed on the New York Stock Exchange is somewhat comprehensible, as the steady-income utility stocks generally are closely held and change hands less frequently than most of the other issues on the Exchange.[10]

What is less comprehensible, however, is the composition or image of the traders in the utility shares. Obviously, they were not chosen in accordance with any recognized sampling procedure based on the law of probability, and cannot qualify as typical or representative of all the investors in utility stocks. Ordinarily, this question commands little attention in rate proceedings, and the presumption is that the market prices of utility securities, although established by minuscule transactions, reflect the composite evaluation by all investors. But when, as now, new investors appear to have gone on a market binge, their economic sobriety becomes a pertinent factor in the determination of an equitable cost of common stock capital.

THE implications are intriguing. As most utility stockholders are interested primarily in the stability of their dividend income, the vicissitudes of the market place are relatively immaterial to them. Consequently, if the earnings requirement on their common stock were to be predicated solely on illusive E/P ratios, they may involuntarily be relegated to the status of "captive" owners of utility shares and compelled to acquiesce in earnings and dividends dictated by the whims of a few compulsive investors.

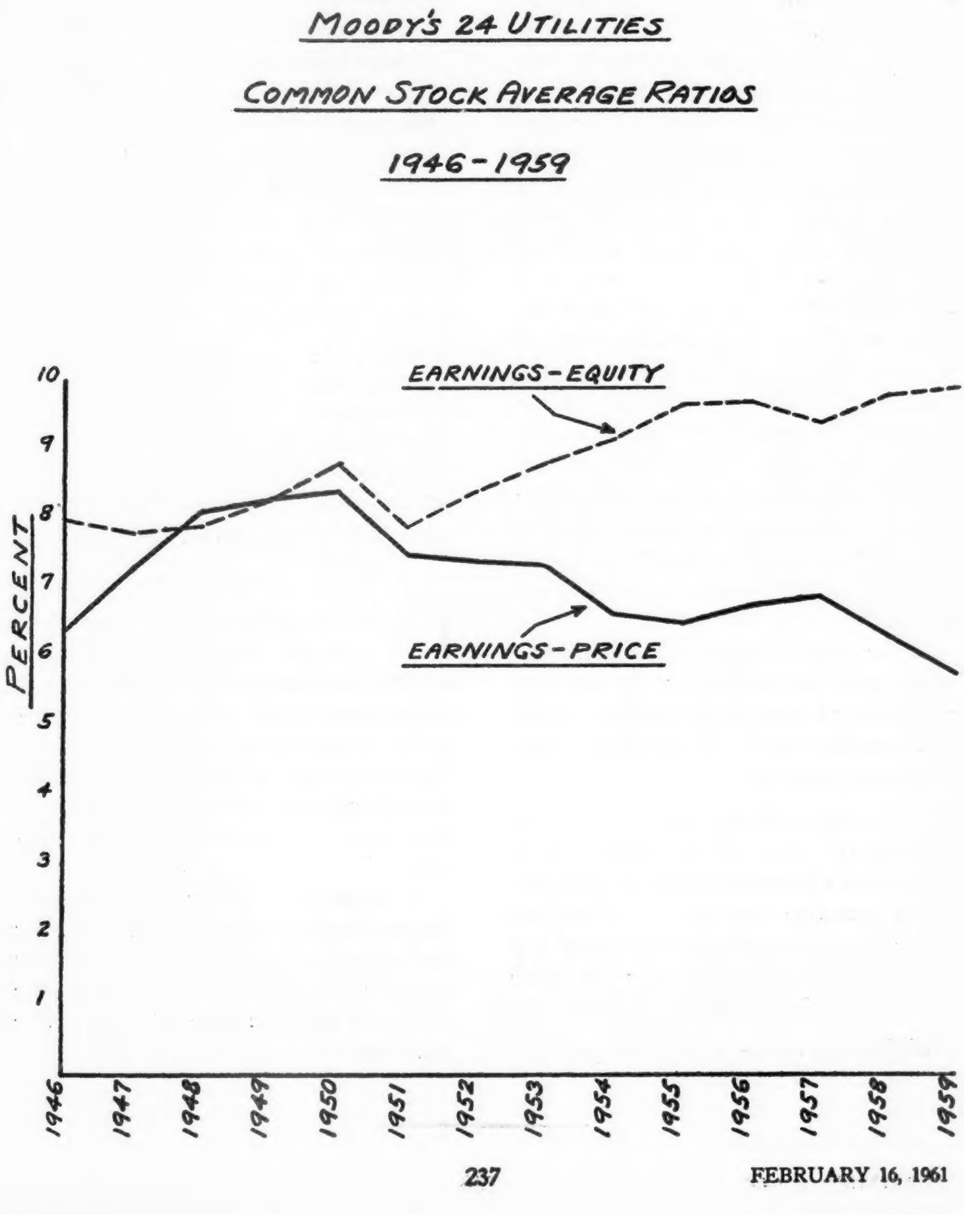
Some Regulators Wary of E/P Ratios

SOME regulatory bodies already have evinced an acute awareness of the infirmities of E/P ratios under existing economic conditions. And they have sought to ameliorate the difficulty by means of "sweeteners" and pragmatic adjustments, presumably within the purview of their informed judgment and expertise. There is no evidence that they have transgressed their administrative discretion. None the less, the anxiety is growing that their continued slavish adherence to this bench mark as the supreme determinant of the cost of common equity may soon deteriorate into regulation by ear, and the subjective fixation of "just and reasonable" rates on the basis of expedience. In order to minimize this danger, it is essential to employ a supplemental and independent criterion which is virtually impervious to the vagaries of the securities market. Such a criterion, in the writer's opinion, is the ratio of earnings to common equity. By itself, the earnings-equity ratio admittedly is vacuous and meaningless as an indication of the cost of *attracting* common stock capital.[11] However, the judicious implementation of this standard in conjunction with E/P ratios can effectually

[10] According to Moody's Stock Survey, the 24 utility stocks in Moody's averages include 17 "income," three "growth," and four without classification; and the 15 utility stocks in the Dow-Jones averages include 11 "income," two "growth," and two without classification.

[11] Some recent cases to this effect: Re Southern Nat. Gas Co. (FPC 1960) 35 PUR3d 179; Re United Gas Pipe Line Co. (La 1960) 34 PUR3d 78; Pennsylvania Pub. Utility Commission *v.* Commonwealth Teleph. Co. (Pa 1960) 33 PUR3d 503; Washington Pub. Service Commission *v.* Pacific Power & Light Co. (Wash 1960) 33 PUR3d 433.

FIGURE 6


MOODY'S 24 UTILITIES
COMMON STOCK AVERAGE RATIOS
1946-1959
EARNINGS-EQUITY
EARNINGS-PRICE
PERCENT
10
9
8
7
6
5
4
3
2
1
1946
1947
1948
1949
1950
1951
1952
1953
1954
1955
1956
1957
1958
1959

resolve the perplexity of "compulsive" investors and "captive" owners of utility common stocks.

FIGURE 6, page 237, shows the respective trends of earnings-equity and of E/P ratios of Moody's utilities from 1946 through 1959. During this 14-year period, the earnings-equity ratios averaged 8.82 per cent *versus* 7.12 per cent for the E/P ratios. Beginning 1951, when they were separated by a negligible spread of only 40 basis points, the average earnings-equity ratio rose almost uniformly each year to a level of 9.92 per cent in 1959, while the average E/P ratio declined to 5.76 per cent, creating a spread of 4.16 percentage points. Thus, for rate-making purposes, after selecting the appropriate barometer utilities and test period, the "zone of reasonableness" for the determination of an equitable *allowance* for common equity would range between the earnings-equity and the E/P ratios of these utilities as the terminal guideposts.

These criteria appear to be in consonance with the authorities. In the landmark case of Federal Power Commission *v.* Hope Nat. Gas Co.[18] the United States Supreme Court said:

> The rate-making process . . . *i.e.*, the fixing of "just and reasonable" rates, involves a balancing of the investor and the consumer interests. . . . From the investor or company point of view it is important that there be enough revenue not only for operating expenses but also for the capital costs of the business. These include service on the debt and dividends on the stock. . . . By that standard *the return to the equity owner should be commensurate with returns on investments in other enterprises having corresponding risks.* . . . Rates which enable the company to operate successfully, to maintain its financial integrity, *to attract capital,* and *to compensate its investors for the risks assumed* certainly cannot be condemned as invalid. . . . (Emphasis added.)

Manifestly, under the standards prescribed by the Supreme Court, a utility's earnings are adequate if they enable the company (1) "to attract capital," and (2) "to compensate its investors for the risks assumed," "commensurate with returns on investments in other enterprises having corresponding risks." The first requirement can be measured by earnings-price ratios; the second, by earnings-equity ratios.

IT should be noted here that, until about the close of 1960, the realistic and prudent implementation of earnings-price ratios alone would satisfy the earnings-equity requirement. In the foreseeable future, however, in the absence of a distinct reversal of recent market trends, the application of both criteria appears necessary.

In conclusion, it should be observed that no suggestion is intended herein for the exclusion of any other standards which may be appropriate to the peculiar facts and circumstances of a particular rate case.

[18] (1944) 320 US 591, 51 PUR NS 193.

Public Relations in the Field

By JOHN O. GUNN*

The public relations director of a utility should do more than tell utility people they ought to function as good-will ambassadors for the company. He should explain the psychology of people, with special emphasis on how the average customer feels towards a large utility company. Utility personnel should be told the importance of the personal "extras" they can do beyond regular good service, the importance of doing community work, learning to talk to customers in language they can understand and in terms of their problems, not the utility's. And finally the public relations man should encourage utility employees to consult him as problems arise, for by so doing management will keep informed of potential customer crises.

PERHAPS there was a time when application of the principles and practices of professional public relations could safely, if not altogether wisely, be confined to upper-echelon utility management.

If so, that time clearly has gone forever.

The public relations requirements of utility companies are far too important and far too demanding today to be entrusted for execution solely to a single staff department, however competent, or to a small group of top executives, however excellent their personal qualifications. An awareness and daily observance of procedural public relations in all aspects and at all levels of utility operation have become vital to corporate success—in a growing number of instances, to corporate survival.

IF line personnel are to be expected to practice public reations in the field, they must, of course, have a working knowledge of the subject. This requires training; and the natural place to go for such training is to the company's own expert, the public relations director.

*Vice president, Bozell & Jacobs, Inc., and director of the agency's investor-owned utilities service division, New York, New York. For additional personal note, see "Pages with the Editors."

In consequence, all across the country, public relations directors of utility companies are being called upon to prepare for their associates in divisional and district line elements, what amounts to a short course in applied public relations.

What basic approach is most useful in such a discussion?

To date, most internal lectures of this type have been devoted very largely to telling the assembled line personnel about the importance of getting every employee into the public relations act. The presentation then follows a well-established pattern, which may be summarized as follows:

THE average customer's opinion of a local utility is based not nearly so much on what the company *says* in its advertisements, commercials, news releases, and public statements of all kinds as it is on what the company *does,* day after day, in individual communities throughout its service area. It is routine customer contacts which count most of all. The company's most important public relations man of the moment is not the president or the public relations vice president, but the serviceman who carefully asks a housewife's permission before temporarily blocking her driveway; the meter reader who goes out of his way to avoid stepping on a flower bed or a newly planted strip of grass; the collection clerk who takes the trouble to investigate and explain an apparent deviation in monthly bills; the telephone operator who shows a genuinely friendly interest in seeing to it that the customer is promptly connected with the proper department.

THESE things are perfectly true, and they are important. But I wonder whether they may not be properly assigned to the primer category in an industry which by now has advanced in public relations consciousness at least to the fourth- or fifth-grade level? I wonder whether the public relations director who confines his remarks to such an elementary stage does not incur the risk of boring a present-day audience of typical operating people, and of losing in the process an invaluable opportunity to enlist their active field support?

Why Not Explain Human Nature?

MIGHT it not be more realistic, and a great deal more complimentary, if he were to address himself primarily to an exploration of human nature? Is not human nature, after all, the basic raw material of the utility business as well as the chosen field of concentration of the public relations professional?

Suppose, then, that the public relations director were to adopt this approach for his scheduled speech at the company's next conference on district operations. He assigns himself the task of pinpointing those human characteristics which can be expected largely to determine the average customer's attitudes toward the company. A competent and conscientious practitioner will have no difficulty either in identifying those characteristics or in making the identification process truly meaningful to his line audience.

Though details of content and emphasis will of course vary somewhat to fit the specific local circumstances of the individual company, it seems to me that the resulting talk may well go something like this:

THE dominant factor which characterizes the typical customer's feeling toward the company which provides him with his utility service is *indifference.*

This is a psychological lesson of experience which is especially difficult for utility operating people to recognize and accept, bound up as they themselves are in the vital importance of the service they render—but it is a lesson that must be mastered if genuine rapport is to be established between company and customers. The average fellow you are dealing with, day after day, simply is too preoccupied with his own problems, plans, and prospects to give any attention at all to yours—unless, until, and solely to the extent that you can convince him that the particular problem under discussion is not yours, but his—in which case, he will give you a real hearing, and a real hand if necessary.

The Government-in-business Viewpoint

PROPONENTS of government in business long ago developed a cynical corollary to this hard fact of economic life. It is an interesting thesis, and it merits some thought, however much we may prefer to reject it out of hand.

In the abstract, runs this viewpoint, the typical citizen could not care less whether he gets his electricity (or his gas, or water, or telephone, or mass transportation service) from an investor-owned company, a government agency, or what have you, just so long as he gets all the service he wants, when he wants it, at a price he is willing—if not happy—to pay. And why is this? Because, say our ideology-minded mentors, the average persons tends to be, if anything, an excessively practical individual. They believe they can count on him, in the absence of extraordinarily moving special circumstances, to think in terms of what seems immediately best for himself and his family, period—and to seek a dollar-and-cents expression of the personal advantage he is after.

It follows, then, that such basic tenets of economic democracy as the principle that a government should not compete with its own citizens will have a hard time standing up against this sense of "practical reality" which the political businessmen attribute to Mr. American, unless these tenets happen to agree with what he has already concluded is in his own financial interest.

IF this unattractive thesis is correct, almost everybody may pay lip service to free enterprise as "the American way," yet surprisingly few will permit that consideration to prevent them from making a "fast buck" at the other fellow's expense. A fascinating doctrine, this, and a useful one for those who embrace it, since it explains—for them—such surprising phenomena as the fact that the

well-to-do segments and even the business proprietors of a community—those who owe the most to the free enterprise system, and who clearly have the most to lose from its piecemeal dismemberment—have not infrequently supported a politically inspired effort to replace an investor-owned utility system with a government operation. The reason assigned by the theorists is, of course, that these people see some immediate short-term personal advantage in the change—lower property taxes, subsidized bills, or a chance to do business on a highly profitable basis with a political utility system. And certainly it is true that people in such a fast-profit, get-mine-first frame of mind might deliberately close their ears to talk of what is right and wrong or what is best for the public as a whole.

Investor-owned utilities reject this entire rationale of government in business as morally corrosive and gratuitously insulting to the people they serve. Their rejection of it is both proper and correct. In dismissing the corollary, however, let us not overlook the continuing validity of the proposition from which it sprang: People are preoccupied with their own problems, not with yours; the company they welcome is the one whose representatives are ready to help them find *solutions,* not additional burdens.

Speak in Terms of Customer Needs

When you are prepared to talk with your customers in terms of *their* needs and *their* desires, you have taken the long first stride toward a receptive hearing. But you must remember that you cannot really communicate with people at all unless you speak a language they understand.

Any business which is as highly technical and as engineering-oriented as is that of providing a utility service inevitably develops an internal terminology of its own. This is fine—so long as we reserve that terminology for internal use only, and do not try to use it as a means of public expression, where it quickly becomes meaningless.

Take the technical jargon of the electric industry, for example. The average citizen has as much chance—and approximately as much desire—to decipher a foreign tongue as he has to understand the very practical distinction between a kilowatt and a kilowatt-hour, let alone the relatively subtle distinctions between a watt, a volt, and an ampere, an ohm, and all the rest of the terms in the basic dictionary of the trade. Throw "load factor" at him and he is hopelessly lost. And, if you want to see the fur really fly, try sitting down with John Q. Residential Customer and explaining why you are installing a "demand meter" at his home.

These language difficulties extend to some quite unexpected places. Several months ago, the Electric Companies Public Information Program engaged Central Surveys, Inc., to conduct depth interviews with customers of 53 electric companies at 67 separate locations in 33 states. Among the findings was the fact that only one person in every three understands what is meant by the terms "private power" and "public power"—despite all the time, effort, and money that have been expended for more than a quarter-century, on both sides of the fence, to popularize these labels. But the recognition factor jumped sharply when "private power" was rephrased to read

"investor-owned company" or "shareholder company," and when "public power" was translated to "federalized power," "nationalized power," or simply "government power."

So far, then (the public relations director continues), we have concluded that the average customer cannot be expected to concern himself with the problems involved in bringing him his utility service; that his first interest naturally is in the best overall utility cost-and-service package he can obtain; and that he can be conversed with effectively only in *his* language, rather than yours.

What a Typical Customer Is Like

Now let us take a somewhat closer look at the typical customer with whom utility men in the field are in contact every day. (For clarity in the development of this presentation outline, the assumption is made at this point that the readership being addressed is composed of electric utility operating people. With quite obvious changes, however, a similar discussion could, of course, be prepared for representatives of any other utility service.)

Every member of the general public has a direct and personal interest (though a largely inactive one) in the operation of the local electric company, for each one is an actual or potential customer of the company. Moreover, he is, or can readily be persuaded to consider himself, a "captive customer," for normally he has no choice as to the source from which he will purchase his electricity, and no effective choice as to whether or not to buy electricity at all, since electric service is a prime necessity of civilized existence.

This immediately removes two "escape valves" which tend to prevent explosive public opinion from building up against most types of business enterprises. The customer of a bank, or a grocery store, or a stationary shop, or a gasoline station can take his trade elsewhere if he develops a real or fancied grievance against the proprietor; or he can, if he wishes, discontinue use of a product altogether, replacing one metal with another, wood with plastic, wallpaper with paint, and so on. In his dealings with the local electric company, this relatively complete

freedom of choice and action is denied to him.

Some Utility Handicaps

THESE factors present a very complex set of special public relations problems. These problems are further magnified by the intangible nature of the commodity serviced, for electricity cannot be seen, or heard, or smelled, or tasted, or touched without unpleasant sensation. The fellow who likes "to see what I'm getting for my money" has a built-in mental block with respect to his electric service—he sees the television set, but not the electricity which brings it to life, and so he disregards that electric service altogether, until the bill comes in or the service goes off.

As if this group of public relations handicaps were not enough, the electric company has still another—that of size. It is a well-established psychological fact that people tend to regard a small enterprise as "warm and friendly," a large one as "cold and impersonal." Yet the volume economics of the electric business is such that only a large—and therefore "cold and impersonal"—company can provide adequate, dependable electric service at reasonable rates.

IT is worth noting, too, that this particular enterprise—unlike the large steel company down the road, or the large textile firm at the corner—cannot effectively counter unfavorable local opinion with a reference to its payroll, patronage, and tax payments. Other industries can leave town and transfer their operations elsewhere if they wish; the electric company cannot. It is a locally franchised concern with nowhere else to go, and it has the enforceable obligation to continue serving the community, come what may.

The sharp rise and increasing mobility of America's population further intensifies the impact of these psychological hurdles, by making it much more difficult for an electric company to counter the public relations pressures inherent in the business with public relations policies and practices of its own. Any utility whose service area added its share of the nation's 18.5 per cent increase in population during the decade between the 1950 and 1960 censuses—a statistic which represents 27,997,377 additional Americans—today has thousands of customers who have had no previous experience with the company, and who therefore are not preconditioned to a favorable response. In the "growth areas" of the South and West, mass migration has placed this problem at the top of the public relations list; but its proportions are substantial in the more "settled" regions as well.

The Customer's Frame of Mind

ALL right then (says our hypothetical public relations director), let us take the average electric company customer. Let us put him in the frame of mind which is likely to result from the feeling that he has no choice as to whether or not to buy electricity, and no choice as to where to buy it. Let us add the completely intangible, and therefore highly mysterious, nature of electricity itself —which gives rise to the oft-repeated assertion that electricity is not a service, but a "natural resource" that properly belongs, "like air," to "all the people."

Let us place at the other end of this commodity a large, "cold and impersonal" company. Then let us deposit this average customer in any of the 200 communities served by our own company—and the unpleasant possibilities become obvious.

This is the basic psychological situation which you operating people face daily out in the field. How do you meet this situation? You meet it in part, of course, by providing the finest of electric service at rates which anyone who gives real thought to the matter must agree are miraculously low for the value involved.

AND yet—remembering the frame of mind of your average customer, I think you must accept the conclusion that he is not going to thank you for keeping his lights on or for smiling at him while he pays his bill. He takes these things for granted. As a matter of fact, it often is hard to evoke enthusiasm from him even for the really difficult and important things. In this respect, he may remind you of the fellow who had been going around town saying some very unfavorable things about a long-time friend. The stories inevitably got back to the friend, who cornered him on the street one day.

"Joe," he said, "a number of people have told me that you've said I'm not worth the powder to blow me up. I can't understand this, because, Joe, you know I've always gone out of my way to give you a helping hand."

"Now, just a minute," said Joe. "What did you ever do for me?"

To which the friend replied: "Didn't I jump in and save your life when you were drowning in the lake five years ago? Didn't I house and feed and clothe your family when your home was destroyed in that fire a year later? And didn't I send your son through college when you lost your job and had to go on relief?"

"I know all that," said Joe, "but what have you done for me *lately?*"

"Extra" Services Count a Lot

THE casualness with which the average customer accepts quite authentic miracles of daily electric service inevitably puts one in mind of Joe. Yet the fact is that Joe Customer has a surprising appreciation of the little "extra" services which he does not expect, and to which he does not feel entitled. And he can remember such "extras" over a surprising period of time.

Electric companies throughout the country today enjoy their most enthusiastic level of support among people who are fifty-five years of age or older—and the basic reason which an entire series of opinion surveys suggests for this is that these older people recall and appreciate, as if it had just happened yesterday, the understanding forebearance with which electric companies overlooked tardy payment of electric bills during the depression of the 1930's. The same thing is

true of such "bonus" services as free fuse replacement; it is not unusual for a housewife to speak with genuine gratitude of a fuse-replacement call made at her home by an electric company serviceman fifteen or twenty years before.

The sustained appreciation resulting from such unexpected services is a major source of electric company strength today. On the other hand, there is a developing problem of frightening proportions inherent in this same phenomenon. For the disturbing fact is that opportunities to build up such a reservoir of public good will on which to draw in the future are being lost today, all across the country, as the inevitable consequence of a number of industry-wide developments which are depriving electric companies of personal contact with their customers.

THE sheer growth in size of the average company is one such development, of course. But the public relations consequences of this physical fact are further accelerated by increasing use of outside meters, constant reduction of the number of local community offices maintained by most companies, almost universal adoption of post card billing, the growing popularity of check writing, which has increased many fold the number of electric bills paid by mail rather than in person, and the pressure to reduce costs which all electric companies feel today, and which frequently finds expression in curtailment or elimination of the "bonus" services for which customers traditionally are most grateful.

I mention these things not in order to find fault with the cost administration of this company, or of others throughout the industry. Most, if not all, of the steps involved were probably unavoidable if electric rates were to be kept down in an inflationary era of skyrocketing component costs. I mention them only in order to draw attention to the very definite public relations problem they have created—a problem so alarming, for electric companies everywhere, that a counterbalancing reaction finally has set in. As just one expression of this reaction, Niagara Mohawk Power Corporation went back to envelope billing not long ago, and Pennsylvania Power & Light Company and Central Hudson Gas & Electric Corporation, among others, are preparing to do so this year.

IF by this time (the public relations director goes on) I have painted a rather dark picture of the overall psychological climate in which electric companies generally, and our own company specifically, are called upon to operate, I have no apology to make. I think the ascertainable facts of the matter clearly support such a picture.

On the other hand, there is no cause at all for defeatism in anything I have said. You operating people are facing a number of formidable public relations obstacles and handicaps out in those divisions and districts of yours. But there is not a single one of you whose territory includes more than a relative handful of customers who are basically opposed to the company. Granted that you could make no more fatal mistake than that of dismissing the opposition as unimportant simply because it is so small in numbers —and granted, further, that the numerical handful is always susceptible to outside leadership, which immediately gives it the dangerous aspect of an *organized*

opposition—there nevertheless is no reason whatever why you and I, working together, should not be able to meet all the public relations challenges confronting the company in the field.

How to Have Good Public Relations

How do we go about it? Or, more accurately, how do *you* go about it, since the great bulk of the work necessarily rests on your shoulders rather than mine?

First, of course, you are going to want to continue extending every effort to give your customers, all of them, the best possible electric service, day after day, at the lowest reasonable rates. This is by no means the whole answer—if it were, the company would not have any public relations problems worth mentioning today—but no one will ever come up with an acceptable answer of which this is not the principal ingredient.

Second, as you go about your daily business of providing topflight electric service, travel the "extra mile," wherever and whenever you can, to give the customer that little additional courtesy and that little bonus attention to which he is not, strictly speaking, entitled—and which he therefore appreciates far out of proportion to the time and trouble it involves. If you can replace a defective fuse for the housewife or rescue her daughter's cat from a pole, by all means do it, whatever the original purpose which may have brought you into the neighborhood.

Third, remember always to treat each customer as an individual, rather than as just a number in the meter book. Show a *personal* interest in him and his problems.

Fourth, in all your daily contacts with customers both on and off the job, keep firmly in mind the fact that the other fellow is and always will be interested in *his* problems rather than yours. For example, when you talk with a customer—or with a friend or a neighbor—about electric taxes, do not state the case in terms of taxes paid by the company. Try telling him, instead, about the taxes the company is forced to collect from *him* as part of *his* electric bill.

Fifth, work constantly to identify your own interests, and therefore those of the company you represent, with the best interests of the people and communities you serve. True identification of this kind can only be accomplished by *deeds,* rather than by mere words. And there is no better way to accomplish it than by taking an active personal part in the major civic affairs of the community—educational, charitable, professional, yes, and political, if you as an individual citizen feel so inclined.

Sixth, make the substantial extra effort required to talk with the customer in *his* language, rather than yours. If you are not willing to translate the technical jargon of the electric business into plain, everyday English, you can bet that the customer will apply his own rule of thumb to the conversation—and come up with a translation which gives you none the best of it.

FINALLY, if the public relations director can overcome for the moment the innate modesty which is the hallmark of the profession, it seems to this particular observer that he should close his talk by reminding his operating audience that the company does not expect them to stand alone. He should make it perfectly clear that they as line people have every right to call on the public relations staff for help whenever and wherever they feel the need of qualified professional assistance. He should point out, too, that this right is accompanied by the obligation to keep top management fully informed of developing field problems *before* they have erupted into full-blown public relations crises.

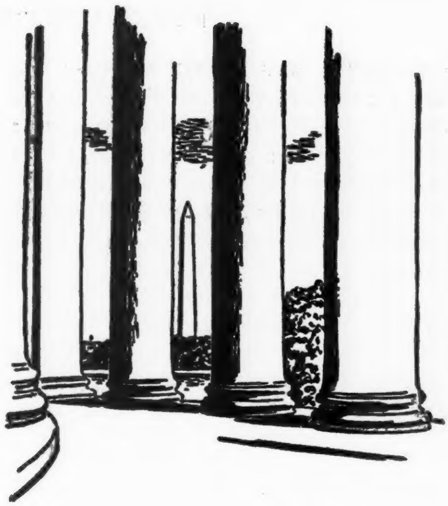
The public relations director who outlines these basic principles for field implementation will have done a great deal more than simply hold his listeners. In my opinion, he will have laid out the guide lines of an action program which is at once professionally sound and realistically attainable.

THE utility company which gives such a program the priority effort it both requires and deserves is well on the way to earning the privilege of echoing the words of James B. Black, board chairman of Pacific Gas and Electric Company: "Even Mahomet couldn't move mountains without people. And out where we operate, we *are* the people."

"THE federal saline water conversion program got under way in fiscal year 1953 with an appropriation of a modest $175,000. In fiscal year 1960, the Office of Saline Water awarded more than 50 research, development, and construction contracts totaling about $3 million, and teamwork—a working partnership of federal, state, and private interests—has continued to be the earmark of the national program. Today, more than 100 research centers and universities and industrial firms are spending their time, money, and energy in this field, beyond what the government invests. The University of California alone, for example, has a saline water research program annually totaling a half-million dollars."

—GEORGE W. ABBOTT,
Former Assistant Secretary, Department of the Interior.

Washington and the Utilities



Echoes of the Transco Case

In view of the unanimous decision of the U. S. Supreme Court in the celebrated Transco case, as written by Chief Justice Warren, there seems to be little expectation among Washington observers, regulatory lawyers, or natural gas interests affected, that anything would be done to alter the court's ruling. The immediate preoccupation in this area was to try to figure out what the impact of the court's ruling would be.

Concern is felt in some quarters that this decision puts the federal government in a dominating position with respect to the purpose for which gas is used and shifts, to the federal government, authority over conservation matters previously assumed by the producing states. The case involved a proposal by Consolidated Edison Company of New York to buy gas directly from Texas producers and to carry it from the gas fields, via a subsidiary pipeline, to the New York city area for use as boiler fuel. The commission denied the application to construct the pipeline on grounds that the price was too high and that the consumption of the gas as boiler fuel was an inferior use.

It was contended on behalf of the FPC that such direct sale and transportation of gas would make it possible for large quantities of gas to be sold without control of either price or use, because the FPC has no direct control of such sales. The lower court disagreed with the commission, holding that the Natural Gas Act gives the FPC no authority to consider such factors. Under the high court's decision the FPC does have such authority and will doubtless be urged to use it in an increasing number of cases where the so-called "inferior use" is an issue. The coal industry is naturally enthusiatic over the outcome of the case. Some pipeline companies as well feel that the case supports the conventional pattern of producer-pipeline relationships, subject to FPC price and service regulations, as distinguished from direct industrial sales not subject to FPC control. The decision may adversely affect other boiler fuel pipeline supply arrangements not yet approved by the FPC.

Some Congressmen from gas-producing states felt that the court was writing law. But none was optimistic that the southwestern voting delegations in Con-

gress could muster anything near the strength to change the court's opinion by statute, even if President Kennedy were disposed to agree to such a course, which he probably is not. What makes it so difficult to determine how far these judicial lawmaking decisions extend is the gradual way in which they proceed. Before the court's 1954 decision in the Phillips case, for example, there were those—including the FPC membership itself—who believed that natural gas producers were exempt from both price and service regulation.

After 1954 the exemption in the Natural Gas Act for producers and gatherers was swept away as far as rate making was concerned. And now, with the court's decision in the Transco case, it is a fair question whether the exemption means very much at all from a practical viewpoint. Of course, Chief Justice Warren's opinion took care, as most law-writing decisions usually take care, to minimize the apparent impact of the order. It denied any sweeping implications to the effect that direct sales of gas might hereafter be entirely barred by the FPC. Warren said:

> Neither the court nor the commission holds in this case that sales to pipelines are generally more in accord with the public interest than other sales. Nor do we authorize the elimination of direct sales of gas under appropriate circumstances nor the denial of a certificate to any arbitrarily chosen group of purchasers. All we hold is that the commission did not abuse its discretion in considering, among other factors, those of end-use pre-emption of pipeline facilities and price in deciding that the public convenience and necessity did not require the issuance of the certificate requested.

But three justices of the court, dissenting in part, apparently felt that the Federal Power Commission in this case was using "end use," as well as the proposed price of gas, as an excuse to block the direct purchases of gas for boiler fuel by electric utilities and other industrial users. With the FPC now assured that it has "discretion" to consider these factors, among other things, is there much doubt that the FPC will take the next step of making such discretionary consideration a matter of routine? Thus in little soft steps does the judicial lawmaker proceed to a predetermined goal.

The Independent Petroleum Association of America on January 25th declared that the Supreme Court's decision on the "end use" of natural gas abrogated fuels policies established by Congress. The court ruled that the FPC is empowered to say whether gas intended for industrial boilers—in this case those of Consolidated Edison Company— endangers supplies set aside for household and commercial users.

Industrial Reaction

The IPAA, representing thousands of independent oil and gas producers, said in a statement that the Supreme Court had delegated to the FPC authority "which Congress never granted or intended." It said the court had ruled that natural gas be "saved" by denying its use to classes of consumers; that this means the federal government has authority to control the "end use" of gas, "forcing consumers to use a less desirable fuel—coal"; that the government's function is to "ration gas supplies by controlling both prices and end uses, with little or no regard to whether adequate gas will be found to meet future demands of the consuming public"; and that "every aspect of gas production, transportation, and sale should

be regulated, with the government having the authority to control all aspects not under state regulation."

The association added that "through the mechanism of a legal decision, an unsound and uneconomic philosophy of government has been thrust upon the American economy."

What happens now to the future of smog control in our larger cities? Chief Justice Warren brushed off the argument that the use of gas as boiler fuel in the New York city area would assist the electric utilities to co-operate in reducing air pollution due to coal or oil. The court said simply that there was no proof of it. But as the smog problem increases—as it probably will—the question of control will become more important than ever. And the most important question of all might be where the control will be exercised—at the city, state, or federal level.

AND so while the coal interests rejoice in the immediate effect of this decision in blocking what might otherwise become a pattern of direct sales from gas producers to wholesale consumers without the "middleman" agency of regulated pipeline operations, a longer-range prospective might cause some concern, even in the coal fields. For if the power of decision moves to Washington, as to who shall use gas for what purpose, corollary questions of federal control are sure to follow. If the federal government can say who shall use gas, can it also one day say who shall use electricity, and under what circumstances? And if it can do this much, shall the federal government one day say who shall use coal or—in order to avoid air pollution—who shall *not* use coal, oil, etc.?

Congress has already demonstrated its virtual impotence to rewrite, correct, or alter such judge-made law in this area. Given sufficient partisan or regional division of sentiment in the face of such decisions as the Phillips decision of 1954, the court majority always seems to get its way by default, simply through the unwillingness of Congress to spell out what it means one way or the other, in plain statutory language.

The subtle progress of judicial law writing is not a new phenomenon. A divided court usually is able to walk between a divided Congress. A determined Chief Executive might alter this; but in the present circumstance the influence of the White House seems to be in the direction of more regulation, not less.

No Immediate Change at Interior

NO early drastic policy shift in the realm of federal power development is seen at the Interior Department. At his first press conference on January 24th the new Secretary of Interior, Stewart L. Udall, promised that he would go easy on any revolutionary proposals. He did say, however, that his department was studying a number of things which his predecessor did before leaving office.

"We like to make our own policy around here," said Udall, clearly implying that he was not too happy about having Interior policy made for him "by those who are just going out the door."

And so Udall indicated that "several actions taken in the eleventh hour" of the Eisenhower administration will be reviewed. In the field of legislation, Secretary Udall indicated that he would support the Burns Creek reclamation project in Idaho. He also stated that he had requested recall of departmental testimony of the FPC on the Nez Perce and High Mountain Sheep power sites on the Middle Snake river.

One order by former Secretary Seaton which Udall will be asked to change, but probably won't, was for the construction of 2,000 miles of federal transmission lines to carry hydro power from the Colorado river basin into five states. This was one of the last acts of retiring Secretary Seaton. At issue is whether the government or private industry should construct the $157 million facility, which would transmit power to Arizona, Utah, Colorado, New Mexico, and Wyoming.

E. M. NAUGHTON, president of the Utah Power & Light Company, has stated that his group would "oppose before both Senate and House Appropriations committees the allocating of any funds to construct transmission lines parallel to or duplicating our lines." According to Naughton, privately owned utility executives in five states will oppose governmental competition with investor-owned business and will continue to build transmission lines designed to fill the gap between present facilities and the new dam sites.

The expansion by the investor-owned utilities is expected to cost about $90 million. It is the belief of the utility companies that only $42 million would be required of the federal government for transmission facilities if the private utility lines are used to "wheel" the power.

A statutory proposal of interest to Interior would allow the federal government to use any high-voltage transmission lines which cross government land. It has been introduced by Representative Moss (Democrat, California). The proposal (HR 3323) would require federal agencies, authorizing the use of government lands for an electric transmission line (carrying 33,000 or more volts), to obtain an agreement from the company permitting the government use of the surplus capacity of the line.

THE federal government would also be allowed to increase the capacity of the facility in order to handle greater amounts of federally generated electricity. Provision is included for part payment by the government of maintenance and operating costs and for any expansion of capacity which might be made as a convenience to the government. The bill was referred to the House Interstate and Foreign Commerce Committee.

Senator Morse (Democrat, Oregon) has introduced a bill which would require the Budget Bureau to list Rural Electrification Administration loans as investments and not as expenditures. This proposal (S 195), which has been introduced in several other sessions, would require the government to distinguish between capital investments and expenditures in governmental budgetary accounting. At the present time, investments and expenditures are grouped together as debits. The proposal, referred to the Government Operations Committee, has the support of the rural electric co-operatives.

Gas Bills in Congress

A FLURRY of bills to amend the Natural Gas Act was featured just before the change of administrations on January 20th. One of these followed the familiar pattern of exempting gas producers and gatherers from the Natural Gas Act. This was HR 172 by Representative Williams (Democrat, Mississippi) which would amend § 1(b) of the Natural Gas Act by inserting at the end thereof the following new sentence:

For the purpose of the subsection the term "production or gathering of nat-

ural gas" (note: which is exempted by § 1(b) from the provisions of the act) includes the sale of natural gas by the person engaging in its production or gathering, if such person is not engaged in (or affiliated with any natural gas company engaged in) the transmission of natural gas to consumer markets in interstate commerce or the distribution of natural gas to the ultimate consumers.

Representative Harris (Democrat, Arkansas), who as chairman of the House Interstate and Foreign Commerce Committee has been the author of several earlier bills to exempt natural gas producers in whole or in part from FPC control, has introduced a new legislative proposal of his own (HR 24).

The latest Harris Bill would exclude from FPC jurisdiction the transportation and sale of natural gas in or within the vicinity of the field or fields where produced except that the sale of natural gas under producer contracts would be subject to regulation to the extent provided in the bill.

New producer contracts and amendments to existing contracts would be unenforceable to the extent they carried "favored-nation" or "escalation" clauses. New producer contracts and indefinite pricing clauses in existing contracts would be subject to economic regulation on the basis of the "reasonable market price of the natural gas at the point of delivery specified in the contract." The bill would restrict off-peak sales of gas for consumption by the purchaser (which is aimed at the so-called "boiler fuel" use) to a rate no lower than the commodity rate plus 50 per cent of the demand rate, or a similar restriction under zone rate tariffs.

The Harris Bill would also wipe out the present provision of the Natural Gas Act (§ 4(e)) which prohibits the FPC from suspending rate increases for sales for industrial use. The intervention of coal and other fuel interests into FPC gas rate cases would also be prevented by a proposed amendment to § 15(a) of the act, declaring that intervention by a person by reason of production, processing, transporting, or marketing of competitive fuels would not be authorized.

The bill by Representative Abernethy (Democrat, Mississippi) would amend the act with respect to successive suspension of rate increases by adding the following language to § 4(e):

> ... except that no such proposed change shall go into effect while there is already in effect a rate or charge with respect to which the commission, under the next sentence, has ordered the natural gas company to furnish bond and which affects any of the persons affected by the proposed change.

Government Transport Policy Criticized

Low-cost procurement practices by government agencies have been blamed for the nation's transportation problems. This is the charge recently made by Stuart G. Tipton, president of the Air Transport Association of America. Tipton estimated that about 12 cents of every dollar taken in by the combined transportation industry comes from the government. However, he stated that special arrangements with agencies for discounted rates are "cutting the pins out from under all of us—railroads, bus, and truck companies, steamship lines, and airlines."

Telephone and Telegraph

FCC Approves Phone Satellite

THE Federal Communications Commission has authorized the American Telephone and Telegraph Company to put a communications satellite into orbit. The project will be on an experimental basis and the authorization is good until January 1, 1962.

Last October AT&T requested the commission to set aside specific radio frequencies for satellite communications. This portion of AT&T's request was not granted by the commission. However, the FCC did indicate that the experimental communications satellite would probably provide data which would make such assignment of frequencies practical.

Under the authorization as many as six satellites might be launched; however, no commercial service will be permitted. Both voice and TV signals will be sent to the satellite and ground stations in Britain, France, and West Germany are expected to participate in the tests.

Unlike the highly successful Echo I reflector satellite, the new unit will be of the "active" variety. Echo I was merely a giant reflector and did not boost the signals it received. The new satellites, however, will have electronic components which can alter the signal before returning it to ground stations on earth.

The National Aeronautics and Space Administration will launch the AT&T satellites. AT&T estimates that it will cost about $250,000 to build each of the satellites and the launching of each unit will cost some $3 million. Previously AT&T had indicated that it was ready to spend some $170 million for a satellite communications system.

AT&T officials feel that the satellite system is needed to handle the ever-increasing overseas telephone business. A satellite system would not replace the existing cable facilities. AT&T believes that existing cables must be expanded and that a radio-cable-satellite system could assure uninterrupted transoceanic service.

The federal government has indicated its willingness to have private companies participate in the space communications program. Early indications are that the new Kennedy administration will follow the lead of the Eisenhower administration in encouraging companies such as AT&T to put up their own systems with the aid of government rockets.

Although the government has "encouraged" a communications satellite program, it is not quite as simple as all that. There seems to be some confusion as to just where the responsibilities and juris-

dictions of various government agencies begin and end. A potential satellite shot would come under the partial jurisdiction of at least the NASA, the FCC, the State Department, and the military authorities. One of the really sticky questions involves international agreements regulating frequency assignments for space communications. Real snags may be hit when such negotiations open with countries which are less than friendly to the United States.

THERE are indications here in Washington that the Kennedy administration will take some action to relieve the confused and jumbled areas of responsibility for space communications. With mounting overseas telephone usage it is a must that programs such as AT&T's should not be frustrated by governmental red tape. Last year alone some 3 million calls went overseas from the United States. Industry officials believe that this figure will jump to 21 million by 1970 and to 100 million in 1980.

With increases of this magnitude and with the technological know-how at hand, it would be a great shame if international politics or governmental lag should delay the establishment of a satellite communications system.

AT&T to Install Air-line Phones

AT&T seems literally to be shooting for the sky in 1961. Soon after the announcement of the plans for an experimental communications satellite came the disclosure that AT&T hopes to install public telephones on airlines next summer. The action came when the FCC put a "freeze" on six radio channels in the 450-460-megacycle range. The commission stated that these channels "may soon have to be cleared to permit the establishment of an anticipated nation-wide public air-ground radiotelephone service on an interference-free basis." This action is expected to clear the way for an air-line phone service.

Under the AT&T plan telephone messages would be transmitted by radio from airplanes to ground receiving stations. From there the call would go over regular telephone lines and any spot in the United States could be reached. This service is much like the public telephone system recently installed on certain Trailways buses.

The proposed air-line service is still in the development stage, according to AT&T officials. However, ground stations have been established at New York, Pittsburgh, Chicago, Washington, and Detroit.

Toll charges will probably be collected by the air-line hostess or the charges might be reversed. No list of anticipated tolls has been published at this time. However, it is expected that they will be somewhat higher than ordinary ground-to-ground calls.

CWA Lists Economic Recommendations

THE Communications Workers of America, AFL-CIO, has recently formulated a resolution relating to the national economy which has some specific recommendations of interest to the communications industry. The document warns the new administration against trying to do everything in the "first hundred days" and it states that it would be a "fatal blunder" to attempt to compress all the needed economic changes into this initial period.

The resolution asks for the adoption of

a minimum wage of $1.25 per hour, together with expanded coverage. The CWA also advocates an overhaul of the tax structure to close loopholes and increase the allowance for dependents. Tax allowances should also be made, the union feels, for new business enterprises and an overhauling of depreciation and depletion allowances should be made.

Of great interest is the following recommendation:

> Establish in the appropriate executive department, two bureaus, one on "automation" and one on the "consumer." The Bureau of Automation should make a thorough study of the impact of automation at present and in the foreseeable future. It should recommend to the President action required by industry and labor to make certain we use it as a force for the welfare of the people of the United States. The Bureau of the Consumer would protect the consumer against the unsavory forces which are presently selling goods with a built-in short life which depletes our purchasing power and unnecessarily digs into our natural resources.

It seems likely that minimum wage legislation will be enacted and that some adjustment in the tax laws may take place.

However, it is not known if the new administration contemplates the establishment of new bureaus, as suggested by the CWA resolution.

Domestic Telephone Outlook For 1961

THE domestic telephone operating industry expects to continue its plant expansion program in 1961, reflecting increased services and demand, according to the Business and Defense Services Administration in the United States Department of Commerce. The present rate of increase in the number of telephones in service should result in a total estimated gain in 1960 of approximately 3.65 million, or 74.2 million telephones in service at the end of the year. The increase in population and the range of services offered will probably sustain this upward trend for the industry at about the same rate in 1961. Operating revenue for 1960 is estimated by the industry at $8.9 billion.

Construction expenditures are expected to reach $2.9 billion in 1960, and industry estimates for 1961 indicate similar outlays.

The Commerce report indicates that the telephone operating industry is made up of more than 3,400 companies. Telephone facilities now include secretarial answering, telemetering, data processing, data

Year	*Toll*	*Exchange*	*Total*	*Increase in Total over Previous Year*
1953	6,615	179,685	186,000	5,200
1954	6,870	186,530	193,400	7,100
1955	7,780 (est.)	197,020 (est.)	204,800	11,400
1956	8,450 (est.)	208,150 (est.)	216,600	11,800
1957	10,240	219,314	229,554	12,954
1958	9,205	239,849	249,054	19,500
1959 (est.)	9,700	256,000	265,700	16,646
1960 (est.)	10,200	269,800	280,000	14,300

transmission, teletype service, and PBX combinations.

The report states that demand for telephone service maintains a rather steady pace, subject to such factors as population increase, the adaption of metropolitan exchange areas, new services, and plant site dispersions. Following are telephone service statistics for 1953-60, as issued by the department:

Year	*Number in Service*	*Per Cent Increase Over Previous Year*	*Number Per 100 of Population*
1953	50,373,000	4.8	31.3
1954	52,814,000	4.8	32.2
1955	56,243,000	6.5	33.7
1956	60,190,000	7.0	35.4
1957	63,621,000	5.7	37.1
1958	66,630,000	4.7	38.1
1959	70,560,000	5.9	39.7
1960 (est.)	74,200,000	5.2	41.0

Average daily conversations, both toll and local, are increasing by about 14 million above 1959, to a total of 280 million in 1960. Of this total, about 10.2 million are toll calls. Local telephone service is being increased by the use of the metropolitan exchange areas that permit a wider range for local dialing at no additional charge. Likewise, toll calls are increasing because of greater business requirements and easier completion of calls through direct distance dialing. The industry tabulation (page 256) of average daily conversations demonstrates the increased use of service (in thousands).

The telephone operating industry is continuing its expansion plans in accordance with demand. The report indicates that construction expenditures in recent years have been as follows:

Year	*Amount (In Billions of Dollars)*
1956	2.6
1957	2.9
1958	2.6
1959	2.5
1960 (est.)	2.9

The Commerce Department notes that plant investment continues to rise in proportion to construction expenditures. The total investment in the telephone operating industry at the end of December, 1959, was $26.34 billion, and by midyear 1960 it had reached $27.34 billion. At this rate, estimated dollar investment at the end of 1960 should approximate $27.84 billion. Operating revenues also are increasing. From approximately $8.4 billion in 1959, they should increase in 1960 by more than $700 million, to about $9.1 billion. Employment in the industry continues to hold steady at about 700,000.

Construction plans include buildings, telephones, switchboard equipment, pole lines, and cable-wire plant. A substantial increase in telephones anticipated for 1961 will result in a new high, the department believes. Increased services tend to promote increased revenues, which should rise considerably in 1961.

Antarctic Radio Link

A new radio link with bases in Antarctica is now being established. Existing facilities, much of which were left over from World War II, only have a reliability of from 40 to 60 per cent. The new system, costing some $1.8 million, will provide powerful transmitters and sensitive antennas which are expected to give twice the reliability of the present installation.

Financial News and Comment

By OWEN ELY

Electric Utility Stocks—"Hare Versus Tortoise"

THE recent rise in electric utility growth stocks to new high levels has raised the question in some financial circles as to whether utilities are heading for another "1929 peak," when price-earnings multiples ran as high as 50 to 100 for highly leveraged holding company stocks, and as high as 34 for investment-type operating company utilities. (See chart, page 260, showing the historical range of yields and P-E ratios.) In that day there was no great distinction between "rapid-growth" and "slow-growth" utilities—the amount of capital leverage apparently governed the P-E ratio.

If the present buyer of growth utilities is counting on substantial capital gains to offset low current yields, he is to some extent gambling on the continuance of the uptrend in P-E ratios as a stimulus to prices. If, on the other hand, he is counting only on future growth of earnings and dividends to offset the present low return on a growth utility (yields range from about 1½ to 3 per cent), he may have an extremely long wait before the income of his investment will equal that obtainable from employing the same funds in a slow-growth issue with yield of 4-5 per cent. The wide spread in price-earnings ratios between the fast- and slow-growth electric utility stocks is a fairly recent development, and one that may not persist.

IN considering growth utility stocks it is well to keep in mind that they are in a unique position. Unlike rapid growth stocks in the electronics and other popular industrial groups, they are on a regulated basis. This is true only in very limited degree for industrial issues. Regulation of a "blockbuster" type—such as the Holding Company Act of 1935—ended what was left of the 1929 utility "market spree." Regulation today is, of course, far less drastic, but nevertheless a leading growth stock has twice been

DEPARTMENT INDEX

affected marketwise when rate reductions were announced. On the principle that "action and reaction tend to be equal," any continued long advance in the prices of utility stocks might draw increased regulatory scrutiny of the cost of financing, tax savings, etc.

If, therefore, the idea of a continued upward spiral in P-E ratios and prices is envisioned by the buyer of growth utilities, he should temper his views by a careful and sophisticated look at politics and regulation in the states where he is investing. It might even be worth his while to visit some of the officers of his growth utility companies and discuss their regulatory situation. To the extent feasible he might also study the current attitude of the public utility commissioners in each state—their length of service, their political affiliations, the character of their recent rate decisions, etc. He could even go deeper and study the governor's indicated views and the kind of new commissioners he may appoint to office. While only an institution or a wealthy investor can undertake such investigations, some of the large Stock Exchange houses endeavor to keep fairly "au courant" on such matters and their counsel and advice are usually made available to clients.

There is another distinction between utility growth stocks and industrial growth issues. The lure of many industrial stocks is the possibility that the company will develop new products and processes that will produce rapidly expanding sales and profits. The buyer may be justified in paying a high price-earning ratio for that possibility. But in the electric utility industry, very little such possibility exists, although it is true that efficiency is being steadily increased by new devices and methods.

On the other hand, growth utilities have certain "defensive" qualities which are lacking in the more cyclical industrial issues. Also, growth tends to be fairly regular (except for changes due to interest credits, rate increases, weather conditions, etc.). Increases in revenues can be projected with a fair degree of accuracy, since rates of growth, be they fast or slow, tend to persist. Earnings for the common stock can likewise be roughly forecast by application of an assumed rate of return to the growing plant, and by allowing for possible changes in cost of financing and in capitalization ratios. These conditions no doubt count in favor of the utility stock.

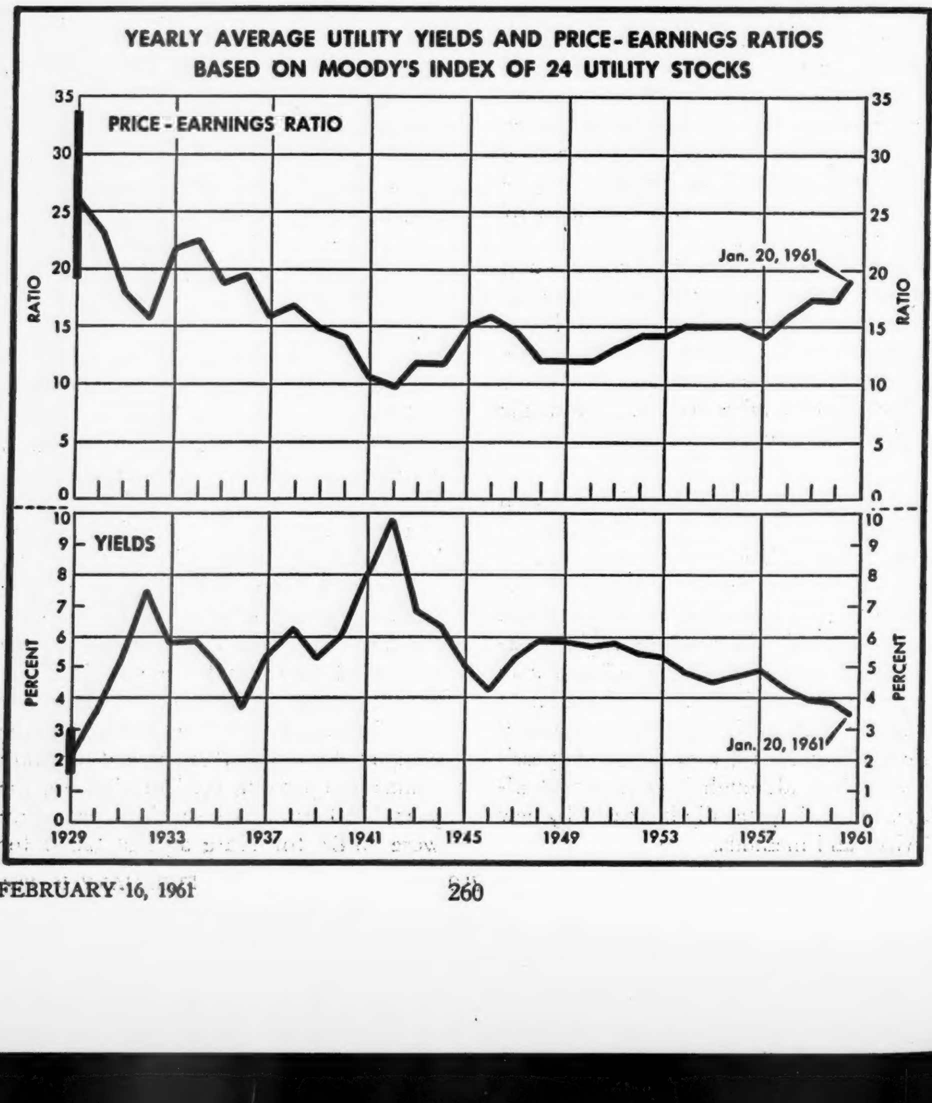
Getting back to the question of the wide range between P-E ratios for electric utility stocks—ranging from about 13 to 31—an interesting study has been made recently by a competent observer. Ten of the most widely held stocks of each group have been selected and averages computed for certain significant figures and ratios. The fast-growth company is called the Hare Electric Company. It is a composite of companies where high rates of growth in number of customers and kilowatt-hour sales have been translated into substantial annual increases in earnings available for the common stock. The composite slow-growth company (also an average of ten typical stocks) is called the Tortoise Electric Company.

There has been a wide difference in the rates of growth of the two groups over the last ten years. As to revenues, the compound rate for Hare was 11.9 per cent annually against 6.1 per cent for Tortoise. As to earnings per share, the compound rate was 10.1 per cent for Hare against 4.6 per cent for Tortoise. For the year 1960 estimated earnings per share were $1.87 for Hare against $2.70 for

Tortoise. Prices at the year end were 52 for Hare against 47 for Tortoise, and the price-earnings ratios 27.8 against 17.4.

The investor in electric utility common stocks who is interested primarily in income now and for years ahead has a three-pronged problem. In view of the much more rapid growth in revenues and earnings by Hare, (1) how great a premium pricewise is Hare now commanding over Tortoise; (2) how will year-by-year income compare; and (3) how long will it be before the yield on Hare will overtake the yield on Tortoise?

To simplify the computation, the future annual compound growth rate in earnings per share on Hare was taken at 10 per cent and on Tortoise at 4.5 per cent. (As indicated above, the composite figures were 10.1 per cent and 4.6 per cent.) As to (1) it has been noted that at the end of last year Hare was selling at 52 or 27.8 times earnings and Tortoise at 47 or 17.4 times earnings. How are these prices related to earnings projected, say, three years hence? Hare earned $1.87 a share in 1960 and, assuming a continuance of the 10 per cent compounding



rate, would earn $2.49 in 1963. Thus, the investor buying the stock at the current price of 52 is paying 20.9 times 1963 estimated earnings. Tortoise earned $2.70 a share in 1960 and, with a compounding rate of 4.5 per cent would earn $3.08 in 1963, so the buyer at the present market of 47 is paying only 15.3 times 1963 projected earnings.

As to the second prong of the problem, present yields are 2.21 per cent on Hare and 4.21 per cent on Tortoise. Obviously, the difference in yield in favor of Tortoise must be taken into consideration, since this difference represents an amount which is available for additional investment each year. (It is assumed that both companies' percentage of dividend payout to earnings will remain constant and therefore the yield growth will be the same as the earnings growth.)

To see how long it would take for the yield on Hare to catch up with and pass the yield on Tortoise, take a look at the following table. This is based upon investing identical amounts in the shares of each company and compounding annually the yields from respective stocks at 3½ per cent (an arbitrary percentage, equivalent to the interest paid by some savings banks), then calculating what the average yield on the original investment would be for various periods. (See, also, accompanying Charts I and II, page 262.)

	Hare Electric	*Tortoise Electric*
Rate of growth (earnings per share)	10.0 %	4.50%
Yield during first year	2.21	4.21
Average yield if each is held for		
5 years	2.87	4.93
10 years	4.03	5.99
20 years	8.05	8.88
24 years	10.72	10.40
25 years	11.52	10.82

The investor in Hare shares would, at the end of ten years, for example, have had an average yield on his investment of 4.03 per cent, whereas the investor in Tortoise would have had 5.99 per cent. Obviously, the longer the period the less would be the difference. Thus, the answer to the third prong of the problem is found to be that, up until some time in the twenty-fourth year, the stockholder of slow-growing Tortoise would be better off, from the standpoint of income, than the stockholder of fast-growing Hare.

Another consideration for the investor is whether the present wide disparity between the price-earnings ratio of Hare and Tortoise is likely to continue. At the end of 1954 the respective ratios were 16.7 and 15.8. At December

COMPARATIVE STATISTICS

	Hare Electric Co.	*Tortoise Electric Co.*
Compound rates of growth over last ten years:		
Revenues	11.91%	6.13%
Earnings per share	10.07	4.56
Dividends paid	9.09	4.28
1960 earnings per share	$1.87	$2.70
Price (12/31/60)	.52	.47
Price times earnings: 12/31/60	27.8	17.4
12/31/54	16.7	15.8
1963 earnings estimate	$2.49	$3.08
12/31/60 price times 1963 earnings estimate	20.9	15.3
Current annual rate of dividend	$1.15	$1.98
Yield 12/31/60	2.21%	4.21%
Pay-out	61.5%	73.3%
Rate of return—Gross income as per cent of total capitalization	6.6%	5.9%

31, 1960, they were 27.8 and 17.4. Chart II, this page, shows how the difference between the figures has widened, especially since 1958. A slight closing up was evident starting in mid-1960. It may well be that these curves will tend to come closer together as time goes on.

UNDOUBTEDLY one of the reasons for the popularity of fast-growth companies is that they are being permitted to earn a better rate of return than the slow-growth companies. Hare is earning 6.6 per cent on its total capitalization; Tortoise 5.9 per cent. (The rates of return on net plant are just about the same in both cases.) Accordingly, the likelihood of Hare receiving an increase in its rates appears remote, and it has recently been indicated that in some areas rate cuts are being required. On the other hand, in the case of Tortoise, the regulatory authorities are not likely to require cuts and there have been a number of instances of increases in rates being granted. As the years go by and the industry matures, and commission personnel and political parties change, it is reasonable to expect that allowed rates of return in the various jurisdictions throughout the coun-

CHART I

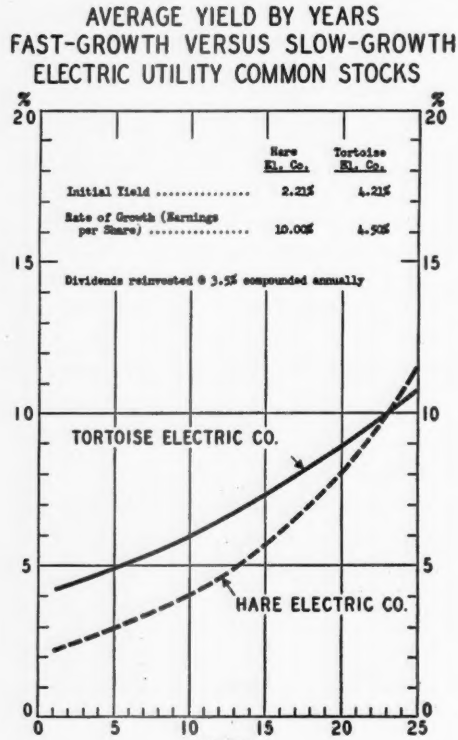
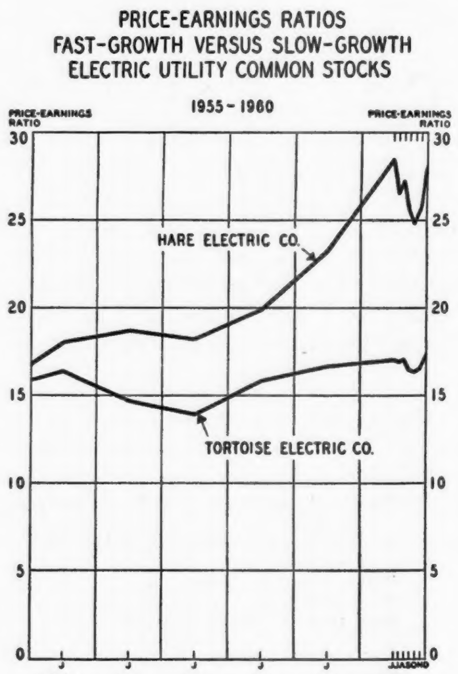


CHART II



try will more and more approach uniformity. If they do, this is another plus factor in favor of Tortoise.

Thus, the study concludes, the investor who is looking primarily for income, and who has fast-growth utility stocks in his portfolio, should ponder these questions: (1) Am I more interested in income twenty-four years from now than during the intervening period? (2) Will the price-earnings spread between the two groups tend to narrow? (3) Will the rate of return earned by the fast group be likely to be decreased and the rate of return earned by the slow group be likely to be increased? If the answer to the first question is no, and to the rest of them yes, the investor would do well to make a switch now from fast-growth to slow-growth electric utility shares, if his tax situation will permit it.

Georgia Power Company's Views on "Flow Through"

In this department, in the November 24th issue of the Fortnightly, reference was made to the action of the Georgia Public Service Commission in permitting Georgia Power Company to retain normalization of tax savings resulting from accelerated depreciation. The testimony of Vice President Herman W. Boozer of Georgia Power, and the several exhibits which he filed to demonstrate his arguments, may be of interest to those concerned with this highly controversial issue, which involves both state commissions and utility companies.

Mr. Boozer first pointed out the practical value of accelerated depreciation to consumers, in providing interest-free capital as a contribution to construction programs. During 1960, he stated, deferred income taxes would generate over $3.7 million of interest-free capital for his company or about one-seventh of the amount of new funds required (other than cash generated through retained earnings and depreciation). In other words, it would have been necessary to sell that amount of additional securities if the company had not availed itself of accelerated depreciation.

Regarding normalization of deferred taxes, he felt that the commission's approval had contributed to a "favorable market for our securities." He stated that if there should be any change in the accounting treatment of deferred income taxes, "it would undoubtedly be an unsettling influence on investment sentiment and could easily cost us a higher rate of interest on our upcoming bond issue." Moreover, the fact that the company had obtained a total of over $30 million in interest-free funds in the past seven years (under §§167 and 168 of the Tax Code) had not cost customers a penny more than if the company had not exercised its tax options, since the policy of the commission had been to deduct the reserves from the rate base.

Regarding the practical need for normalization and reserves to protect the company against possible future increases in its income tax payments, Mr. Boozer pointed to the possibility that the Internal Revenue Code might be revised to end accelerated depreciation. A number of bills to revise the code were introduced into the last two Congresses, and adherents of the permanent tax-saving philosophy are constantly seeking repeal of the liberalized depreciation provisions. The revision, if accomplished, might not be complete abolition of liberalized depreciation for tax purposes by utilities, but might merely require that book depreciation should correspond to tax depreci-

ation. (This would have much the same effect on earnings as a change in the Tax Code.)

REFERRING to argument usually advanced by proponents of the flow-through practice—the use of accelerated depreciation will cause a *permanent* annual tax saving unless and until plant balances begin to decline—this view is usually supported by tabulations which assume steady annual amounts of property additions, or steadily increasing amounts. In other words, steady growth is assumed over a period of some thirty years or more. Mr. Boozer stated:

> Such statistical tabulations are far removed from the realities of life. No utility ever grows or increases its aggregate plant balance in constant arithmetic progression, year after year, nor does its plant grow in equal dollar amounts, year after year, nor does its plant remain static with dollars of additions exactly replacing dollars of retirements. There are always ups and downs. Recent years have witnessed our greatest growth in history. The leanest period was during the great depression of the early 1930's. Then there was the period of war restrictions during the 1940's. In view of present world conditions, who can say we will not at any time enter another war period. A war would bring rationing and restrictions that would practically stop growth other than for national defense. Based on experience in previous wars, such emergency facilities would undoubtedly be financed largely under Code §168 or its equivalent, which is generally admitted to develop a tax deferral. The remaining essential plant replacements falling under §167 would be extremely low during such war years, just as they were during the years 1942 to 1946.

FINANCIAL DATA ON ELECTRIC UTILITY STOCKS

Annual Rev. (Mill.)			*1/25/61 Price About*	*Dividend Rate*	*Approx. Yield*	*Recent Share Earns.*	*% Incr. In Sh. Earn. Recent*	*% Incr. In Sh. Earn. 5-yr. Aver.*	*Price-Earn. Ratio*	*Div. Pay-out*	*Approx. Book Value*
$152	S	Allegheny Power System	44	$1.70	3.9%	$2.38N	2%	5%	18.5	71%	$18
324	S	American Elec. Power	63	1.88c	3.0	2.53De	5	8	24.9	74	24
63	O	Arizona Pub. Serv.	53	1.20	2.3	*2.01Se	*11	*6	*26.4	60	18
13	O	Arkansas Mo. Pwr.	23	1.00	4.3	1.44Se	7	3	15.9	69	10
38	S	Atlantic City Elec.	38	1.20	3.2	*1.57N	*10	*9	*24.2	77	12
169	S	Baltimore G. & E.	29	1.00	3.4	1.42Se	—	8	20.4	70	13
9	O	Bangor Hydro-Elec.	45	2.20	4.9	3.32De	7	8	13.6	66	30
7	O	Black Hills P. & L.	35	1.48	4.2	2.56Oc	1	4	13.7	58	22
124	S	Boston Edison	69	3.00	4.3	4.10De	11	4	16.8	73	51
31	A	Calif. Elec. Power	21	.84	4.0	*1.02Se	*D12	*10	*20.6	82	12
24	O	Calif. Oreg. Power	47	1.60	3.4	*1.94N	3	*	*24.2	82	26
10	O	Calif. Pac. Util.	23	.90	3.9	1.32N	—	4	17.4	68	12
76	S	Carolina P. & L.	46	1.48	3.2	2.24De	3	6	20.5	66	21
34	S	Cent. Hudson G. & E.	30	1.00	3.3	*1.46Se	*5	*8	*20.5	68	13
26	O	Cent. Ill. E. & G.	45	1.44	3.2	2.34Oc	8	12	19.2	62	15
43	S	Cent. Ill. Light	39	1.52	3.9	2.13De	D13	10	18.3	71	18
60	S	Cent. Illinois P. S.	59	1.92	3.3	2.99N	10	7	19.7	64	20
20	O	Cent. Louisiana Elec.	31	1.00	3.2	1.28De	14	7	24.2	78	19
42	O	Central Maine Power	28	1.40	5.0	*1.97N	*19	*	*14.2	71	21
160	S	Cent. & South West	39	1.02	2.6	1.44Se	4	6	27.1	70	11
12	O	Cent. Vermont P. S.	23	1.08	4.7	*1.41N	*5	*2	*16.3	77	13
140	S	Cincinnati G. & E.	39	1.50	3.8	2.26Se	23	3	17.3	66	16
8	O	Citizens Util. "B"	19	.56	3.0	.78Se	14	6j	24.4	72	4
130	S	Cleve. Elec. Illum.	56	1.80	3.2	3.05Se	4	9	18.4	59	26
8	O	Colo. Cent. Power	33	.75	2.3	1.30De	21	10	25.4	58	12

Annual Rev. (Mill.)		(Continued)	1/25/61 Price About	Dividend Rate	Approx. Yield	Recent Share Earns.	% Incr. In Sh. Earn. Recent	% Incr. In Sh. Earn. 5-yr. Aver.	Price-Earn. Ratio	Div. Pay-out	Approx. Book Value
52	S	Columbus & S. O. E.	54	1.80	3.3	2.88N	21	6	18.7	62	24
454	S	Commonwealth Edison	70	2.00h	5.3h	3.84N	5	10	18.2	52	33
16	A	Community P. S.	35	1.00	2.9	1.52Se	6	6	23.0	66	12
89	O	Conn. Lt. & Pwr.	28	1.20	4.3	*1.47De	*6	*6	*19.1	82	15
615	S	Consol. Edison	69	3.00	4.3	*3.88De	*D1	*6	*17.8	77	49
258	S	Consumers Power	63	2.60	4.1	3.45De	D7	5	18.2	75	35
90	S	Dayton P. & L.	58	2.40	4.1	3.25Se	1	4	17.8	74	30
53	S	Delaware P. & L.	44	1.20	2.7	1.62Se	2	9	27.2	70	26
267	S	Detroit Edison	50	2.20	4.4	2.68De	15	3	18.7	82	27
156	A	Duke Power	52	1.60	3.1	2.24Se	4	10	23.2	71	20
101	S	Duquesne Light	27	1.18	4.4	*1.52Se	*10	*5	*17.8	78	10
36	O	East. Util. Assoc.	43	2.20	5.1	2.58N	D16	6	16.7	85	26
3	O	Edison Sault Elec.	17	.90	5.3	1.11Se	D20	6	15.3	81	9
17	O	El Paso Electric	49	1.16	2.4	1.77Oc	17	7	27.7	66	11
13	S	Empire Dist. Elec.	34	1.36	4.0	1.92Se	8	7	17.7	71	16
62	S	Florida Power Corp.	38	.88	2.3	1.28Se	20	10	30.0	69	12
155	S	Florida P. & L.	65	1.00	1.5	2.08Se	9	17	31.2	48	15
4	O	Florida Pub. Util.	20	.72	3.6	1.28Se	5	9	15.6	56	10
231	S	General Pub. Util.	29	1.16	4.0	*1.53Se	*2	*7	*19.0	76	15
7	O	Green Mt. Power	22	1.10	5.0	1.45Oc	18	3	15.2	76	12
78	S	Gulf States Util.	37	1.00	2.7	1.38De	2	8	26.8	72	11
54	A	Hartford Electric	65	3.00	4.6	*3.42Se	*D10	NC	*19.0	82	43
27	O	Hawaiian Elec.	67	2.50	3.7	3.11Se	D5	7	21.5	80	34
105	S	Houston L. & P.	94	1.60	1.7	3.27De	8	6	28.7	49	21
34	S	Idaho Power	56	1.80	3.2	2.60Se	20	1	21.5	69	27
104	S	Illinois Power	59	2.20	3.7	2.92N	10	14	20.2	75	20
54	S	Indianapolis P. & L.	50	1.90	3.8	2.64Se	10	9	18.9	72	18
33	S	Interstate Power	23	.95	4.1	1.17Se	—	4	19.9	81	8
42	S	Iowa Elec. L. & P.	45	1.80	4.0	2.56N	7	6	17.6	70	20
51	S	Iowa-Ill. G. & E.	44	1.90	4.3	2.50N	D3	4	17.6	76	20
47	S	Iowa P. & L.	42	1.60	3.8	2.38Se	NC	3	17.6	67	18
40	O	Iowa Pub. Service	21	.88	4.2	1.23N	4	4	17.1	65	10
17	O	Iowa Southern Util.	36	1.48	4.1	2.06De	D6	9	17.5	72	20
64	S	Kansas City P. & L.	60	2.32	3.9	3.31De	7	6	18.1	70	29
36	S	Kansas G. & E.	54	1.68	3.1	2.76De	—	7	19.6	61	22
54	S	Kansas P. & L.	44	1.42	3.2	2.49Se	8	9	17.7	55	17
47	O	Kentucky Util.	40	1.60	4.0	2.65Se	D4	6	15.1	60	23
8	O	Lake Superior D. P.	27	1.28	4.7	1.77N	NC	4	15.3	72	17
136	S	Long Island Ltg.	46	1.40	3.0	*2.18Se	*9	*9	*21.1	64	20
66	S	Louisville G. & E.	54	1.52	2.8	2.69De	9	8	20.0	56	21
12	O	Madison G. & E.	30	1.00	3.3	2.07Se	3	3	14.5	48	39
5	A	Maine Pub. Service	24	1.24	5.2	1.44N	D1	2	16.7	86	14
8	O	Michigan G. & E.	81	2.00e	5.8e	5.75Se	4	12	14.1	35	29
198	S	Middle South Util.	33	1.00	3.0	1.49N	15	7	22.1	67	14
31	S	Minn. P. & L.	38	1.60	4.2	2.50N	13	5	15.2	64	21
16	S	Missouri P. S.	22	.72f	5.3	1.10N	12	5	20.0	65	8
8	O	Missouri Util.	30	1.44	4.8	2.02Se	18	—	14.9	71	18
46	S	Montana Power	32	1.12	3.5	*1.49Se	*6	*8	*21.5	75	9
172	S	New England Elec.	23	1.08	4.7	1.35De	1	3	17.0	80	15
52	O	New England G. & E.	27	1.24	4.6	1.84De	7	5	14.7	67	17
105	S	N. Y. State E. & G.	30	1.20	4.0	*1.88De	*4	*8	*16.0	64	18
285	S	Niagara Mohawk Power	41	1.80	4.4	*2.20Oc	*8	—	*18.6	82	23
104	O	Northern Indiana P. S.	71	2.32	3.3	3.36Se	11	5	21.1	69	26
170	S	Northern Sts. Power	29	1.18	4.1	1.49Se	4	6	19.4	79	12
12	O	Northwestern P. S.	26	1.10	4.2	1.77Se	17	6	14.7	62	12
151	S	Ohio Edison	37	1.48	4.0	2.14De	8	6	17.3	69	17
58	S	Oklahoma G. & E.	35	1.20	3.4	1.47De	1	6	23.8	82	11
29	S	Orange & Rockland Utils.	40	1.10	2.7	*1.53De'59	*20	*14	*26.1	72	14
19	O	Otter Tail Power	37	1.80	4.9	2.32Se	D11	6	16.0	78	24
535	S	Pacific G. & E.	79	2.60	3.3	4.07Se	9	5	19.4	64	42
58	O	Pacific P. & L.	44	1.80	4.1	*2.32N	*22	*4	*19.0	78	23
138	S	Penn. P. & L.	28	1.25	4.5	1.73De	—	5	16.2	72	13
264	S	Philadelphia Elec.	55	2.24	4.1	2.84De	D2	5	19.4	79	26
40	O	Portland G. E.	36	1.32	3.7	2.03N	20	4	17.7	65	18
82	S	Potomac Elec. Power.	35	1.32	3.8	*1.96Se	*20	*9	*17.8	67	18

Annual Rev. (Mill.)		(Continued)	1/25/61 Price About	Dividend Rate	Approx. Yield	Recent Share Earns.	% Incr. In Sh. Earn. Recent	% Incr. In Sh. Earn. 5-yr. Aver.	Price-Earn. Ratio	Div. Pay-out	Approx. Book Value
102	S	Pub. Serv. of Colo.	67	2.10l	3.1	2.95Se	15	6	22.7	71	27
369	S	Pub. Serv. E. & G.	46	2.00	4.3	2.70De	19	4	17.0	74	24
88	S	Pub. Serv. of Ind.	52	2.10	4.0	2.58N	D6	3	20.1	81	27
34	O	Pub. Serv. of N. H.	21	1.04	5.0	1.39Oc	7	2	15.1	75	14
17	O	Pub. Serv. of N. M.	42	1.00	2.4	1.62Se	7	10	25.9	62	12
32	S	Puget Sound P. & L.	36	1.56	4.3	2.11Se	1	9	17.1	74	23
72	S	Rochester G. & E.	44	1.80b	7.1b	*3.01De	*D7	*7	*14.6	60	30
10	S	St. Joseph L. & P.	36	1.60	4.4	2.25Se	12	6	16.0	71	18
71	S	San Diego G. & E.	34	1.20	3.5	1.91N	13	8	17.8	63	18
12	O	Savannah E. & P.	32	1.12	3.5	1.32N	5	1	24.2	85	12
12	O	Sierra Pacific Pr.	54	1.60	3.0	2.47N	4	14	21.9	65	17
280	S	So. Calif. Edison	68	2.60k	3.8	*4.31Se	*16	*6	*15.8	60	42
56	S	So. Carolina E. & G.	49	1.40	2.9	1.99Se	12	6	24.6	70	19
8	O	Southern Colo. Pr.	23	.90	3.9	1.17N	D1	—	19.7	77	13
297	S	Southern Co.	49	1.50	3.1	2.06De	7	8	23.8	73	17
21	S	So. Indiana G. & E.	41	1.70	4.1	2.60N	3	2	15.8	65	21
9	O	So. Nevada Power	33	.84m	2.5	1.46Oc	20	5	22.6	57	15
4	O	Southwestern E. S.	18	.76	4.2	1.01De	—	5	17.8	75	8
52	S	Southwestern P. S.	28	.88	3.1	1.13De	8	6	24.2	78	7
41	A	Tampa Electric	38	.72	1.9	1.22De	25	12	31.2	59	11
183	S	Texas Utils.	84	1.92	2.3	3.11N	7	9	27.0	62	21
47	S	Toledo Edison	20	.70	3.5	1.08Se	D7	2	20.4	65	9
20	O	Tucson G. E. L. & P.	36	.80	2.2	1.21Se	12	8	29.8	66	9
147	S	Union Electric	40	1.80	4.5	*2.18Se	*20	*5	*18.3	83	17
39	O	United Illum.	31	1.38	4.5	*1.74Oc	*5	*1	*17.8	79	16
6	O	Upper Peninsula Pr.	32	1.60	5.0	2.11Se	22	—	15.2	76	19
50	S	Utah Power & Light	36	1.32	3.7	1.88N	2	5	19.1	70	19
151	S	Virginia E. & P.	50	1.20	2.4	1.86N	11	9	26.9	65	17
36	S	Wash. Water Pr.	45	2.00	4.4	*2.41De	*D10	*7	*18.7	83	29
82	O	West Penn Power	69	3.00	4.3	3.61Se	4	3	19.1	83	26
13	O	Western Lt. & Tel.	52	2.40	4.6	3.51N	10	6	14.8	68	27
32	O	Western Mass. Cos.	24	1.20	5.0	1.59N	D6	—	15.1	75	18
134	S	Wisc. El. Pr. (Cons.)	44	1.80	4.1	2.83Se	3	7	15.5	64	27
48	O	Wisconsin P. & L.	38	1.48	3.8	2.38Se	1	7	16.0	62	21
46	S	Wisconsin P. S.	31	1.30	4.2	2.05N	9	5	15.1	63	17
		Averages			3.8%		7%	6%	19.6	70%	
		Foreign Companies									
217	S	American & Foreign Pr. ..	9	$ .50	5.6%	$1.30De'59	D33%	0%	7.0	38%	$32
151	A	Brazilian Traction	4	.25	6.3	.58De'59	D10	—	6.9	43	28
97	A	British Col. Pr.	37	1.60	4.3	2.48De'59	27	9	14.9	65	36
20	O	Calgary Power	25	.40	1.6	1.06Se	9	18	23.6	38	6
18	A	Gatineau Power	39	1.50	3.8	1.98De'59	D22	—	19.7	76	21
16	A	Quebec Power	35	1.60	4.6	2.41De'59	3	9	14.5	66	26
77	A	Shawinigan Water & Pr. ..	29	.68	2.3	1.45De'59	D10	8	20.0	47	19

*Deferred taxes resulting from liberalized depreciation are not normalized. If they had been normalized the price-earnings ratio would be higher, and the rate of increase in share earnings would be smaller. D—Decrease. NC—Not comparable. A—American Stock Exchange. O—Over-counter or out-of-town exchange. S—New York Stock Exchange. Ja—January; F—February; Ma—March; Ap—April; My—May; Je—June; Jy—July; Au—August; Se—September; Oc—October; N—November; De—December. b—Also 3 per cent stock dividend (paid January 25, 1961) included in the yield; similar dividends are paid annually, representing balance of earnings. c—Also 2½ per cent stock dividend January 10, 1961. e—Also regular annual 3.3 per cent stock dividend (3 per cent paid in previous years), included in the yield. f—Also regular stock dividend of one-half per cent quarterly, included in yield (paid since 1956). h—Also 2.4 per cent stock dividend December 1, 1960, included in yield; stock dividends are paid annually, reflecting balance of earnings. j—The rate of increase would be 12 per cent if the present number of shares had been used to compute share earnings of past years, instead of using the number of shares actually outstanding at the end of each year. k—Also 4 per cent stock dividend February 24, 1961. l—Also 5 per cent stock dividend February 17, 1961. m—Fifty per cent stock dividend payable January 18, 1961—cash dividend on new stock 84 cents.

What Others Think

Portland's Paying Transit System

EVERY now and again the casual newspaper and periodical reader is apt to get the feeling that city transit problems have no solutions. The commuter very often feels as though he should give up and move into his office or at least walk to and from work. This glum picture is produced by the vast maze surrounding the city transit problem which includes such factors as rapid growth of highly centralized city areas, increased surface traffic, steep cost increases, and the thousand and one other factors that besiege the industry. Such a web of troubles is not easy to untangle and the commuter, caught between his own personal transportation problems and the seeming slow correction of existing faults, is likely to gain little cheer from newspaper accounts of committee recommendations and multitudinous "studies."

Recently *The Harvard Business School Bulletin* carried a story by Charles C. Bowen, entitled "They Said It Couldn't Be Done," which outlines the steps that were used to put the Portland Transit Company of Oregon on its feet and out of the red ink column.

Mr. Bowen states that the story began in the thirties, when he became interested in the link between accounting and management consulting. As a result of his interest the firm of Charles C. Bowen & Co., certified public accountants and management consultants, was established in 1939. Mr. Bowen states:

> This firm turned out to be the key to our venture in the public transportation business. The idea of an accounting firm in the consulting field attracted substantial investors seeking advice in the use of their funds. We became appraisers of businesses for prospective buyers and sellers and were asked to represent banks and investment houses on the boards of various companies. Through these channels we became interested, in 1945, in the situation which later developed into Portland Transit Company.

PORTLAND ELECTRIC POWER COMPANY had been reorganized under the Bankruptcy Act and the trustees representing the court were looking for a buyer for the Portland Traction Company, a subsidiary of Portland Electric, which operated a mass transportation and terminal freight system. Mr. Bowen states that the trustees were insisting that the purchaser take over the interurban railroad and "everyone seemed to agree that the railroad was a real dog."

A total of $500,000 was needed as a down payment and the money was raised by the formation of Pacific Associates, Inc. Portland Traction was acquired by this group. It consisted of two divisions: The Portland city lines and the interurban which served Oregon City and other communities. The interurban branch handled a quantity of freight which gave the line an edge against a fall-off of passenger patronage.

In 1946, a public offering of Portland Transit Company preferred and common stock was made, together with a frank statement regarding the financial status of the company. No sooner had the stock been issued than the war-imposed gas rationing came to an end. This caused a slump in passenger fares. A further difficulty turned out to be equipment which consisted of old-fashioned trolley cars. As a result of these complications Mr. Bowen states:

> In the face of all this, we decided we had to take some forceful action. As volume and revenue fell, we raised fares and redrew the bus lines and schedules. But we did this with some degree of anxiety because, under our charter, we had to go to the city council for approval each time and they sometimes objected to such changes. Furthermore, we were all too conscious of the fact that the company's 20-year franchise was to come up again in 1956. We were concerned that it might not be renewed.

As stated before, the end of gas rationing increased the use and number of automobiles and this also interrupted the transit running time. The company determined that the trolley buses must be replaced even though the public preferred their quiet operation.

The city permitted continued operation of the lines through a series of short-term permits. It appears that at this juncture, rumors regarding the transit system were rife. There was talk of liquidation and municipal ownership. Consistently, the company maintained that if the community failed to permit the line to run in a businesslike fashion, it would have to be liquidated. In this unsettled manner, the line survived for several years:

> Mr. Bowen notes that there was one encouraging item. The freight service on the interurban railroad had helped that segment of the line to show some profit.

At this time, the Rose City Transit Company was formed to operate the city lines. Freight services were maintained under the Portland Traction group and interurban passenger service was discontinued. Due to the public relations problems created by the discontinuance of interurban passenger service, an intensive publicity program was undertaken. This included talks with the mayor and members of the city council and speaking dates so that the public would be informed of the company's side of the transit story.

The readjustments in the system, plus the intensive publicity program, established an atmosphere of understanding, greatly improving relations with the city council, the press, and the riding public. Mr. Bowen states:

> So last year, 1959, Portland Transit made a satisfactory profit, with all subsidiaries contributing to the result. . . . The bank loan has been paid off. The preferred stock has been retired at prices approximating the original issue figure, and, while outstanding, all dividends were paid on their due dates.

Mr. Bowen indicates that one of the most encouraging signs has been the fact that the Rose City Transit system has been able to order several buses of the very latest design. These diesel buses cost less to operate than the old-style trolley buses. Mr. Bowen confesses that to be able to make this purchase was like the realization of a dream. It expressed confidence in the future and reversed the drift of privately owned transit companies into the public ownership field. He notes that as a result of his activities in the transit field, he has frequently been the town villain but that his status has now grown to that of a "solid citizen."

This article gives some insight into the troubles that the transit industry encounters when any change in a transportation system is attempted. All too often the commuter criticizes a transport system without giving full consideration to the franchise difficulties, increased traffic, inadequate equipment, and the host of other facets of the transportation industry. Transportation companies are not in business to give poor service. However, the very nature of this complex industry very often prevents the fast dynamic changes and adjustments which could produce improved service and an accompanying upswing in finances. It can be done, and it appears from this article that it has been accomplished in Portland.

Cold Facts on Baltimore Traffic

A STIMULATING figure is Henry A. Barnes, Baltimore traffic director, who traveled down to Annapolis in a January snowstorm to talk to the state legislature about a metropolitan transit measure. The main point he tried to drive home was that if an authority were not created to begin improvements in mass transportation, the metropolitan area would gradually come to a standstill. There could never be expressways enough or money enough, he said, to move everyone in private cars and provide them with parking places.

The Baltimore *Sun* editorially reviewed Mr. Barnes' testimony to the effect that the first 1½ miles of the proposed Jones Falls expressway would cost as much as the Baltimore Transit Company. Mr. Barnes did not say that he was in favor of buying the transit company, but was simply trying to prove that moving an urban population by private car is many, many times more expensive than providing a mass transportation system.

"INSTEAD of thinking how much this legislation may cost, think of how much more it will cost us if we don't get it," Mr. Barnes told the Maryland lawmakers. The Baltimore *Sun* stated:

> Speaking for himself, Mr. Barnes is one expert who believes that it will not be necessary to have public ownership of private transit lines, if the transit authority is created. He maintains that a metropolitan authority should be able to provide the administrative direction and financial assistance necessary to achieve co-ordinated and expanded services from existing private companies, without taking them over. But, he warns, if the authority is not created and improvements initiated, the city in "two to five years" will be forced to buy the BTC anyway.

The Sun pointed out that only a third of the Baltimore delegation bothered to attend the hearings, although they featured testimony of qualified witnesses.

The March of Events

AGA Announces Gas Turbines For Schools

A REVOLUTIONARY plan for producing low-cost energy in schools through the use of gas turbines has been announced by the American Gas Association. A new gas research study made by a Texas Engineering Company, according to AGA Managing Director C. S. Stackpole, discloses that a 2,300-student air-conditioned compact school with natural gas as its only source of power could be built for about $2.3 million—or about 16 per cent less than the present conventional type of the same size without air conditioning.

Based on the amount of building that should be required in the next ten years to take care of secondary school enrollment, the new way to build them would save about $1.5 billion. And lower first costs will also result in savings of $45 million in insurance and $32 million in reduced interest on bonded indebtedness.

The natural gas turbine that would be used to power the schools is a stationary cousin of the aircraft jet engine. It drives an electrical generator to provide high-frequency power for better lighting and 60-cycle power for motors and convenience outlets. Its exhaust heat can be saved, running it through a waste boiler to make steam or hot water. The steam can be used to run an absorption air-conditioning system to heat water for showers and kitchens, and for steam cooking. It also provides direct heating.

The all-gas air-conditioned school of compact design is estimated to cost $468,000 less to build than the conventional nonair-conditioned school—and $6,362 a year less to operate, the research report points out. Compared with a compact school using purchased electrical power, the all-gas school will operate at about $14,600 less annually.

Mexican Pipeline Plans Progressing

THERE does not appear to be any disagreement between Petroleos Mexicanos and the Mexican government regarding the proposed natural gas pipeline from Texas to California through Mexican territory. Directory of Petroleos Mexicanos said all is progressing normally and nothing has changed since the government signed a letter of intention with the Tennessee Gas Transmission Company and the Southern California Edison Company.

Under the agreement, gas would be supplied by the Humble Oil & Refining Company in Texas, and piped through Mexico

to California. "Pemex" would also sell a portion of its Reynosa natural gas production.

The status of the project now depends on hearings to be held by the Federal Power Commission in Los Angeles on applications by Tennessee Gas and Southern California Edison.

Arizona

Rate Adjustment Authorized

THE Arizona Corporation Commission has approved a new schedule of rates proposed by the Arizona Public Service Company for its commercial and industrial customers in northern Arizona. The adjustment will bring about savings to commercial and industrial customers of about $400,000 a year. The new rate schedule is designed to simplify a complex rate structure built up over the years by a series of mergers.

The company believes that the fairly substantial reduction in electric revenue will more than be made up by the increased use of energy.

The new rates, the commission pointed out, could result in increases to some customers. Personal contacts will be made with the nearly 5,000 customers involved to explain the new rates.

Connecticut

Nation's First Jet Generator

FOR the first time the power of a jet engine will soon be harnessed in Hartford, Connecticut, to produce power to serve homes and industries. The jet engine is the same type of power plant—Pratt & Whitney—used to power commercial jet transports and a variety of military aircraft.

The jet engine generator setup is going to be used by the Hartford Electric Light Company for providing the Hartford area with the additional electrical energy needed during "peak load" hours when consumers make extra demands on the power supply.

The generating unit will produce from 8,000 to 10,000 kilowatts. It is expected that it will be operational by mid-1962 and will be a completely automated installation. Its output will augment that of larger steam-operated plants now in use.

It is about one-fifth the weight of present stationary gas turbine units that produce the same amount of power. Regular jet fuel will be used to power it. The Hartford installation is so designed that the jet engine could be replaced within six hours, compared with several weeks of shutdown time now required for replacement of conventional power plants.

Illinois

Gas Supply Increased

FOR the first time in twelve years the North Shore Gas Company has been able to supply commercial and industrial customers on its waiting list. Letters have been sent to 775 customers, which takes care of the company's space-heating waiting lists through December 31, 1960.

These customers will get gas for the

remainder of the present heating season, it was reported. Easing of gas supply restrictions was authorized by the Illinois Commerce Commission in an order which also increased the utility company's industrial gas service from the present 4,000 therms per month to 100,000 therms per month.

North Shore's increased service has been made possible from additional supplies from the Natural Gas Pipeline Company of America. North Shore hopes to get even more gas from the pipeline company for the 1961-62 heating season. It serves 57,000 customers in 39 communities.

North Carolina

Wood Pole Conference Scheduled

THE North Carolina School of Forestry is sponsor of "The South Atlantic Wood Pole Conference" at Raleigh, North Carolina, on April 5th and 6th.

It will be held in the Student Union on the campus of the North Carolina State College.

A comprehensive program will be presented on basic technology and current information on the production, deterioration, preservative treatment, purchasing, inspection, and maintenance of wood utility poles. Technical papers also will be presented.

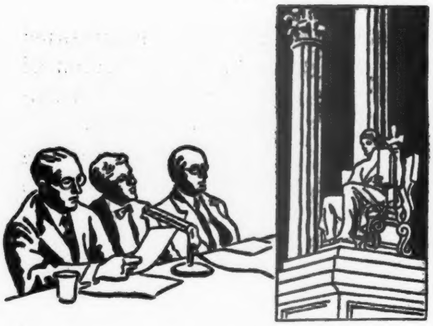
The conference is open to all interested persons. Management and technical personnel in operating utilities, and other users of treated wood products, as well as manufacturers of treated wood products—all those who need information on which to make and carry out sound economic-operating decisions—will find the conference of particular value. Copies of the conference program and advance registration may be obtained by writing to the Wood Products Extension Section, 266 Kilgore Hall, North Carolina State College, Raleigh, North Carolina.

Pennsylvania

Expansion Plans Announced

APPROXIMATELY $7.2 million will be spent in 1961 by The United Gas Improvement Company for the expansion and improvement of facilities to meet the constantly increasing demands by its customers for utility service. In making the announcement last month, E. H. Smoker, UGI president, pointed out that the figures do not include the expenditures which will be made by the Philadelphia Gas Works Division of UGI in its capacity as the operator of the gas supply facilities of the city of Philadelphia.

Smoker stated that about $5.8 million of the total will be spent in the company's four gas divisions, $631,000 in its one electric division, and the balance in its central operations in Philadelphia and Reading. At the latter location, UGI has operated a central meter repair shop for all divisions for a number of years and just recently established an accounting center to perform the large volume operations of customer billing and accounting for the entire system.



Progress of Regulation

Trends and Topics

Enforcement of Customer Deposit Rules To Insure Payment of Bills

Customer deposits are sometimes required as a means of safeguarding a utility against the failure of a few customers to pay their bills. If some such provision is not made for unpaid bills, the loss must be taken up by the utility and eventually falls upon the ratepayers generally. A number of decisions dealing with deposit requirements have been handed down since this subject was discussed in 61 Public Utilities Fortnightly 57 (January 2, 1958).

Commission Interference with Deposit Requirement Set Aside

The Vermont supreme court upheld a $500 deposit requirement of a telephone company for residential service (36 PUR3d 52). The commission had declared this deposit unreasonable and had directed the company to reinstate service following disconnection for failure of the subscriber to meet the demand. The court set aside the administrative order.

Actually, the $500 deposit requirement was in accordance with a company regulation on file with the commission. The regulation specifically provided that the company may require a deposit equal to the estimated telephone charges for a period of three months. It appeared that bills for a three-month period of service to this subscriber amounted to more than $500. The subscriber did not challenge the regulation, as such, but contended that the company's resort to it was arbitrary and discriminatory. Tending to substantiate this contention was a finding by the commission that the subscriber's credit was good and that the company had made no firsthand attempts to investigate his credit. The commission took the position, notwithstanding the filed regulation, that a reasonable deposit could be required only upon evidence that the credit standing of a subscriber would indicate a probable loss to the company.

The court held, however, that since the company's action was in all respects in accordance with its filed rate schedule, the commission's conclusion that

the deposit requirement was "unreasonable and arbitrary" was not supported by the facts. Furthermore, in making it a prerequisite to the application of the regulation that the company demonstrate a bad credit standing of a subscriber, the commission had sought materially to alter the regulation.

The court pointed out that the commission has no power to alter a rate schedule unless the issue is raised in proceedings designed to give notice to all interested parties. It would, of course, be to the interest of other subscribers of the company to avoid having the burden of toll charge losses fall upon them. This would give them standing to be heard on any amendment to the deposit regulation. Moreover, said the court, to impose upon the company the burden of establishing its right to invoke a duly filed and established rate regulation on each occasion of its use would be to set statutory procedures at naught and encourage endless rate litigation.

Enforcement of Deposit Rule Disapproved

Rather at odds with the Vermont case is a decision of the Wisconsin commission where a telephone company was not permitted to impose a $20 deposit requirement in accordance with a filed deposit rule, even though the subscriber had shown extreme laxity in paying bills over a period of years (26 PUR3d 366).

No less than 36 notices threatening disconnection of service had been sent to this subscriber, besides reminder notices and innumerable telephone calls. Under a duly filed regulation, the company "may, in order to safeguard its interest, require an applicant or a customer to make a suitable deposit . . . as a guaranty of the payment of charges." Apparently the company considered that it had good cause in this instance to demand a deposit.

While the commission indicated that it had always recognized the right of a utility to apply a deposit rule, and that the rigid enforcement of the rule could be sustained in this case, it, nevertheless, ordered the company to restore service without requiring a deposit. The commission thought there was "an area of probable misunderstanding on the part of the subscriber which merits a more lenient action." The commission took the subscriber at his word that he would pay promptly in the future, and observed that he must have come to realize that the company had been put to expense in its efforts to collect from him—"expense which would create a serious situation if other subscribers followed the same loose financial practice of this subscriber."

Service Discontinued for Failure to Pay Deposit

In the absence of any unfair practice on the part of the utility, the District of Columbia court of appeals observed, the approved rules and regulations of a utility necessarily enter into any contract made with the utility and are binding on both the customer and the utility (27 PUR3d 384). Actual knowledge of the rules and regulations or assent on the part of the customer is legally immaterial. The court ruled against a customer who sued an electric company, alleging breach of contract and negligence, for damages which resulted to her home from the discontinuance of electric service. The cus-

tomer had failed to honor a demand for a deposit of $15 to insure payment of bills.

Answering a contention that abnormally cold weather at the time of the service disconnection imposed upon the utility an additional burden of care and a duty to modify its normal course of conduct, the court declared that, absent a positive tort, the utility's right to discontinue service for failure to comply with its regulations is unaffected by the fact that a disconnection would result in a foreseeable danger and damage to persons or property. There was neither breach of contract nor negligence.

Increase of Deposit to Establish Credit Denied

The California commission denied the request of a water company for permission to increase the amount of deposit to establish credit to twice the monthly minimum charge for domestic service and twice the estimated average monthly bill for all other service (26 PUR3d 219). Under existing and proposed rate schedules, which provided for annual or seasonal minimum charges to be paid in advance, there appeared to be little or no occasion to apply the deposit rule. The commission thought the currently filed rules were adequate to protect the company against any unusual amount of uncollectible bills, so that no modification of the deposit rule was warranted.

Review of Current Cases

Race Segregation in Bus Terminal Restaurant Violates Interstate Commerce Act

THE U. S. Supreme Court overturned a state conviction of an interstate bus passenger, a Negro who refused to leave the white section of a segregated restaurant in a bus terminal. The passenger was convicted in the police justice's court of Richmond under a Virginia statute which makes it a misdemeanor unlawfully to remain on the land of another after being forbidden to do so. Upon appeal to the Hustings court of Richmond, he asserted a federal right, as he did in the police court, to be served without discrimination in this restaurant, which, he alleged, was used by the bus carrier for the accommodation of its interstate passengers.

The passenger contended that the refusal to serve him was a discrimination based on color and that the Virginia statute, as applied to him, violated the Interstate Commerce Act and the Equal Protection, Due Process, and Commerce clauses, of the United States Constitution. Failing in his first appeal, he carried the case to the Virginia supreme court. There his assignments of error were based on the same grounds of discrimination asserted in the lower court, except that violation of the Interstate Commerce Act was not specifically charged. The state's high court affirmed without opinion.

Decision Based on Commerce Act

The U. S. Supreme Court, on certiorari, took the position that the claims

of discrimination previously made under the Interstate Commerce Act were sufficiently related to the assignments considered within the scope of the issues before it. The petition for certiorari presented only two questions; namely, whether the conviction was invalid as a burden on commerce in violation of the Constitution, and whether the conviction violated the Due Process and Equal Protection clauses of the Fourteenth Amendment. While the Supreme Court recognized that it ordinarily limits its review to the questions presented in an application for certiorari, it determined, nevertheless, to decide this case on the Interstate Commerce Act contention raised in the Virginia courts. It was pointed out that discrimination because of color is the core of the two broad constitutional questions, just as it is the core of the Interstate Commerce Act question.

"Transportation" Includes Restaurant

The Interstate Commerce Act, said the court, uses language of the broadest type to bar discrimination of all kinds. Section 216(d) prohibits interstate motor carriers from discriminating against "any particular person . . . in any respect whatsoever," and § 203(a) (19) includes interstate transportation facilities and property operated or controlled by a motor carrier within the definition of "services" and "transportation."

The court agreed with the state of Virginia that the evidence did not show that the bus company owned or actively operated or directly controlled the bus terminal or the restaurant in it. It declared, however, that the fact that § 203(a) (19) "includes" facilities operated and controlled by the carrier should not be interpreted to exempt motor carriers from their duty under § 216(d) not to discriminate where they choose to provide their interstate passengers with services that are an integral part of transportation through the use of facilities they neither own, control, nor operate.

And so in this case, said the court, "if the bus carrier has volunteered to make terminal and restaurant facilities and services available to its interstate passengers as a regular part of their transportation and the terminal and restaurant have acquiesced and co-operated in this undertaking, the terminal and restaurant must perform these services without discriminations prohibited by the act."

The court held that interstate passengers have a right to expect that the food service voluntarily provided for them in the terminal will be rendered without discrimination, and that the defendant in this case had lawfully remained in the white section of the terminal restaurant under authority of the Interstate Commerce Act.

Dissent Sees No Commerce Violation

Mr. Justice Whittaker, with whom Mr. Justice Clark joined, dissented, asserting that neither in the Virginia supreme court nor in the U. S. Supreme Court had the Interstate Commerce Act issue been presented. Even if the case could be decided on this issue, the justices thought it had not been shown that the Interstate Commerce Act had been violated. The record contained no evidence that the carrier had volunteered to make restaurant facilities available to its passengers as a part of their transportation, or that the proprietor of the restaurant had acquiesced in any such undertaking. Rather, the undisputed evidence showed that the restaurant was in no way affiliated with or controlled by the bus carrier. The dissenting justices could find no

basis, therefore, to support a conclusion that this restaurant was in any way made a facility of the bus carrier, or was subject to the Interstate Commerce Act. *Boynton v. Virginia, 5 L ed 2d 206, 81 S Ct 182.*

Original Cost with Acquisition Adjustment

THE Nevada commission, in granting a telephone company a rate increase, stated that original cost was the best method for determining rate base. It was the theory historically followed in the state, and also the most practical for the commission and the utility.

Costs of all plant items are recorded at time of installation or acquisition on books and records of utilities, the commission said, and only cost factors need be considered. Fair value imposes additional burdens on both the utility and the commission to try and analyze the best method of arriving at a value other than original cost. Also, a burden of fair value is that values of assets are constantly fluctuating both up and down throughout the life of these assets and to try and plot such values in the books and records of any utility is both burdensome and awkward in determining rate base or investment figures.

Acquisition Cost

The company had sought to include certain assets at the cost to the original purchaser, which was substantially higher than the amount the company had paid at time of acquisition. Such a practice would be unfair for the people using the company's facilities, said the commission. They would again be burdened with their share of the original cost of the plant. The taxpayers of the nation, having once paid for the building of the plant, could not be expected to again pay for the same plant. The acquisition cost was the one allowed.

Working Capital

The source of funds for materials and supplies and working cash had to be ascertained, the commission pointed out, before any allowance could be granted. If the utility furnished the funds, the amount should be allowed. However, if the ratepayer provides the funds indirectly or from accrual accounts, the utility should not be allowed to earn on such funds.

The evidence showed that the company had adequate tax accruals and customer prepayments on hand to offset working capital requirements. Therefore, no allowance was granted.

Property Held for Future Use

Certain real estate had been purchased by the company for future growth. At the present time, the property was not needed for utility purposes. In fact, it had been leased and produced income. Therefore, the price paid for the property was deducted from the rate base. Expenses of maintaining the property were deducted from operating expenses, and the revenue produced from the rental of the property was deducted from operating revenues. *Re Henderson Teleph. Co., Inc. I&S No. 236, December 5, 1960.*

Water Company's Rate Case Expense Allowance Adjusted

THE Pennsylvania commission granted a water company a rate increase which would produce a return of 5.6 per cent on the fair value rate base. The company was authorized to amortize rate case expense over a five-year period. The original amount claimed by the company was reduced to reflect savings in income taxes related to the expense and to exclude the unamortized balance from a previous rate case. This latter amount was considered nonrecurring in that the previous amortization period had ended during the test year.

Trended Original Cost

In developing the fair value rate base, the commission considered trended original cost. The method applied by the company for the purpose of establishing original cost by years of installation was considered acceptable for trending forward surviving original cost to the date of the original cost reclassification. Subsequent thereto, the commission thought a more realistic trend for that same plant should be derived on the basis of recent installation experience, either factual (where such data were available) or assumed (reflecting sound and reasonable judgment).

Consolidated Tax Return

The company filed a consolidated tax return with its affiliates. With respect to savings resulting from interest expense on bonded indebtedness paid by the parent company, the commission directed that such amounts be reflected in the allowance. The average annual savings from consolidation over the latest five-year period were considered preferable to the savings resulting in any one year, because of the change in taxable income from year to year of the individual company's participating in the consolidated return. *Pennsylvania Pub. Utility Commission et al. v. West Penn Water Co. C. 17349, C. 17334, C. 17336, November 21, 1960.*

Reorganized Railroad No Longer Entitled to Conjunctional Billing

THE New York commission has ruled that, upon consummation of a plan of reorganization involving the Hudson & Manhattan Railroad Company, the railroad would no longer be entitled to conjunctional billing privileges from the Consolidated Edison Company of New York.

Under the reorganization plan, the railroad would become a real estate holding company, and a subsidiary, to be formed, would actually own the holding stock and control the electric distribution system.

This would result in a violation of the company's tariff governing conjunctional billing privileges, since the present customer would no longer own the premises to which the electricity was supplied nor would it own the private distribution system which had enabled it to qualify initially for conjunctional billing. *Re Consolidated Edison Co. of New York, Inc. Case 18011, December 13, 1960.*

Telegraph Company's Cost Separation Study Accepted

THE California commission, in granting an intrastate rate increase to Western Union Telegraph Company, accepted the company's state cost separation study. The study was predicated on four basic conclusions:

First, the reperforator center was a huge machine serving two or more states, the relative use of which was determined by the volume of traffic passing through the machine. The expense of such reperforator center operation was allocated to each of the area states served on the basis of the ratio of its traffic volume to total area traffic volume.

Second, the physical location of the reperforator center affected distances and costs of transmission within the area, which, if based on actual distance traveled, would penalize certain states and benefit others. Therefore, the cost would be equalized and borne by the area states in proportion to traffic volume.

Third, terminal costs relating to the origination and termination of public message traffic incurred within a state were a direct assessment against the traffic of that state. Such costs were to be allocated between interstate and intrastate operations on the basis of the relative number of message handlings within the state.

Fourth, all expenses, other than those associated with public message services, were to be separated according to service classification and assessed against the state in which such expenses were incurred. Allocation between interstate and intrastate operations would be made on the basis of equipment and facility utilization studies or some other method consistent with the source of revenue to which the particular expense was related. *Re Western U. Teleg. Co. Decision No. 61058, Application No. 42564, November 15, 1960.*

Restoration of Discontinued Telephone Service

THE California commission ordered a telephone company to restore discontinued service to a patron. The commission found that the company had acted upon reasonable cause—a letter from the chief of police alleging the use of the telephone for unlawful purposes, but that the evidence presented at the hearing did not conclusively prove that the phone had been used for an unlawful purpose. An unidentified party had been observed dialing the patron's number from a public telephone for the alleged purpose of placing a bet. The inherent difficulty of accurately detecting a number dialed under such circumstances, said the commission, creates a doubt which must be resolved in favor of the patron. *Garlet v. Pacific Teleph. & Teleg. Co. Decision No. 61087, Case No. 6594, November 22, 1960.*

Contract Carrier Provisions of ICA Construed

THE U. S. district court, construing the 1957 amendment to §§ 203(a)(15) and §§ 209(b) of the Interstate Commerce Act, set aside an ICC order denying a contract carrier permit. The court held that the commission had erred in applying an adequacy test to the permit application in order to determine

whether it was consistent with the public interest and the national transportation policy. It remanded the case to the commission for new findings in the light of the court's construction, noting it had no power to order an administrative body to perform discretionary acts in a particular manner, or to exercise administrative functions itself.

The 1957 amendment to § 209(b) set forth five standards for the commission to consider in contract carrier permit applications: The commission had to consider, first, the number of shippers to be served by the applicant; second, the nature of the service proposed; third, the effect which granting a permit would have upon the services of protesting carriers; fourth, the effect which denying the permit would have upon the applicant and/or the shipper; and, fifth, the changing character of that shipper's requirements. Section 203(a)(15) was amended by redefining contract carriage.

Burden of Proof Not Eliminated

The burden of proving a contract carrier operation to be consistent with the public interest and the National Transportation Policy was not eliminated by the 1957 amendment. The standards of meeting this responsibility were changed, however.

Consideration of the effect of the services of protesting carriers, the third criterion, does not contemplate consideration of the mere existence or availability of a protesting carrier, the court held. Rather, it contemplates the effect, if any, that a permit grant would have on the existing services of that carrier.

The amendment clearly negates limiting a contract carrier permit to cases where no common carrier service is available. Now an element of shipper's service has been affirmatively recognized by Congress. A shipper is entitled to have his distinct needs met. In carrying out this new philosophy of motor carrier service, Congress has clearly indicated that the commission must recognize contract carrier service as a form of transportation applicable when the special needs of each service are considered, under the National Transportation Policy. Congress intended to establish a complementary system of motor transportation in so far as this was possible as a matter of consistency with the public interest and the National Transportation Policy.

Denial Not Justified

Even though the commission may find that issuance of a permit will, in fact, adversely affect a protesting carrier, the court said that, in and of itself, does not necessarily justify a denial of the permit.

A finding by the commission that existing common carrier service was inadequate to meet the reasonable transportation needs of the shipper failed to take into account that the new test under § 203(a)(15) is whether the service is designed to meet the distinct need of each individual customer. While existing specialized services of common carriers may very well be adequate to supply the shipper's reasonable transportation needs, that existing service may not, in fact, meet the distinct or specific need of the supporting shipper.

The court concluded that, to the extent the commission had ruled that the burden was on the applicant to show the protesting common carriers were unable or unwilling to meet the shipper's reasonable transportation requirements, § 209(b), as amended, did not support such an interpretation. It injected into the act the very qualifications and limitations suggested by the deleted portions of the amendment.

The commission could not rule that the proposed service failed to qualify as contract carriage under § 203(a)(15) inasmuch as the service was, or might be, provided by common carriers. Neither could the commission deny the permit under § 209(b) because the applicant had failed to establish that existing common carriers were unwilling or unable to provide the type of service for which a need had been shown. *J-T Transp. Co., Inc. v. United States et al. 185 F Supp 838.*

Electric Rate Reduction Ordered

The Florida commission has again ordered a rate reduction of the financially healthy Florida Power and Light Company. This time, the commission reduced the company's annual revenues by $6,254,000, but left it to management to determine what rate categories the reduction would be applied to.

The commission noted that it was committed to a year-end rate base as a proper measure of a utility's investment upon which it is entitled to earn a fair return. In an attempt to cut rate case cost, the company had tried to reconcile its differences with the commission's staff, a practice which the commission endorsed.

The only clash came over the method of arriving at cash working capital. The company advocated an allowance for working capital equal to the difference between current assets and current liabilities. The commission, on the other hand, saw no reason to deviate from its historic approach. After establishing the amount of cash working capital required by the company, it deducted federal income tax accruals.

Only one other adjustment in the rate base was made. It was a deduction of an amount representing a plant being built, since it had not yet been dedicated to public use. *Re Florida Power & Light Co. Docket No. 6165-EU, Order No. 3076, December 19, 1960.*

FPC Empowered to Terminate Gas Rate Proceedings Without Determination of Reasonableness of Rates

The Federal Power Commission denied applications for rehearing of its order (35 PUR3d 199) which terminated proceedings relating to the rates of Phillips Petroleum Company, a natural gas producer, for a past period involving a 1954 test year.

One applicant seeking rehearing argued that the commission had no authority to terminate the § 5(a) investigation and § 4(e) proceedings without making a finding as to the reasonableness of Phillips' rates. The commission indicated that the record did not justify such a finding, and the public interest did not warrant a continuation of the proceedings. The rates filed in a dozen § 4(e) proceedings produced less revenues than the company's cost of service. There was, therefore, nothing to be gained for the consumer by continuing the proceedings.

Just as the Natural Gas Act allows administrative discretion in the initiation of proceedings under §§ 4(e) and 5(a), the commission also has authority to discontinue the proceedings, it was noted. Regulation under the Natural Gas Act is carried on in the public interest, as indicated in § 1(a), and there is no obligation to continue proceedings to the

point of making a definitive finding as to the reasonableness of rates where the public interest would not be served. Section 16 empowers the commission to do all acts necessary to carry out the provisions of the statute.

Transferred Property Included

Objection was made to the commission's having included in the rate base $8 million representing net investment in the San Juan basin producing leases which were transferred to another company after the 1954 test year. It was contended that this action was improper because the rates under consideration applied to a past period and not to the future. The commission considered the inclusion proper because the investment would be more than replaced after the test year. Moreover, the commission was determining a cost of service not only for the test year but for a reasonable time thereafter.

Eleven Per Cent Return Defended

The allowance of an 11 per cent rate of return was questioned, and it was alleged that the commission had confused the physical risk of producing gas with the financial risk assumed by investors. The commission pointed out that it must not only reflect past expenses in the cost of service and past risks in the rate of return, but that it must also reflect the increasing expense and increasing risk of obtaining a gas supply. The 11 per cent return, allowing 12 per cent for common equity, was therefore considered appropriate.

Spiral Escalation Clauses Not Void

It was contended that spiral escalation clauses in Phillips' contracts were void because they purported to effect a rate change without compliance with § 4 or § 5 of the Natural Gas Act. The clauses provided for a contractual increase in Phillips' rates when its customer pipeline obtained an increase. The commission noted that, while the clauses might change the contractual rights of the parties, Phillips could change its rates only by an appropriate filing under § 4 of the act.

Minor revisions were made in the computation of the producer's cost of service. The revisions made explicit the treatment accorded the cost of raw gas, showed gas used as compressor station and plant fuel separate from the extraction losses and treatment of its cost. *Re Phillips Petroleum Co. et al. Docket Nos. G-1148 et al. November 25, 1960.*

REA Debt Capital Cost Limits Telephone Rate of Return

THE Wisconsin commission limited the Rock River Telephone Company to a rate of return of 4.82 per cent on a net investment rate base in view of the company's high debt ratio of 88.3 per cent and its low REA debt capital cost of 2 per cent. The allowed rate of return will afford a return of 16.69 per cent to the stockholders. Only slightly more than half of a requested rate increase was granted.

Expense Claims Adjusted

Several expense items were reduced for rate-making purposes. A claim for $120 a month paid to an affiliate for office space was reduced to $90 a month. The latter sum was determined to be a

fair rental on the basis of the market value of the rented property computed from assessed value.

A claim for extraordinary losses was reduced substantially. Retired plant was carried on the books at $26 a station and station installations at nearly $17 a station.

The commission adopted a staff calculation of a unit price of $15 for station apparatus and $12 for station installations. This calculation, developed from purchase records, and from discussions with management and repairmen, was considered more nearly to represent original cost. A ten-year amortization period was used.

An item of $200 a year for five years for conversion expense, supported only by vague and indefinite testimony, was considered a nonrecurring item to be charged below the line of return.

Rate Base Items

An appreciable amount of new plant associated with extended-area service to be rendered in 1962 or later was included by the company in its rate base figure. The commission ruled that such facilities must be excluded until such time as the service is actually being rendered. Materials and supplies were allowed on the basis of $2 a station as against $6 a station claimed by the company.

Extended-area Service Discontinued

It was proposed to discontinue an arrangement whereby approximately forty rural subscribers obtained extended-area service to one of the company's exchanges. The conversion of another exchange to automatic service made it practically impossible to continue this particular extended-area service except at a prohibitive cost. The suspension of such service was therefore considered reasonable, pending the establishment of extended-area service to all subscribers in the area. *Re Rock River Teleph. Co. 2-U-5372, November 22, 1960.*

Commission Lacks Jurisdiction over Use of Telephone Poles by Community Antenna Television Company

THE New York commission dismissed, for lack of jurisdiction, a community antenna television company's complaint against the refusal of the New York Telephone Company to permit the attachment of a television cable system to its poles, despite the fact that the telephone company apparently was permitting such use by one of complainant's competitors in the same area. The complaint claimed that such refusal was discriminatory and in violation of the telephone company's obligations under the Public Service Law.

The commission observed that in 1958 it had held that it had jurisdiction to pass upon such a complaint (25 PUR3d 316). However, subsequent to that determination, court decisions (29 PUR3d 383, 36 PUR3d 278) have cast considerable doubt upon the commission's jurisdiction over such a matter. The latter decision (36 PUR3d 278) held that the use of telephone pole space by a community antenna television company was not a part of the public service performed by the telephone company in the business of telephonic communication subject to commission jurisdiction.

Furthermore, according to the commission, by tariff provisions also filed and approved subsequent to its 1958 decision,

the telephone company has held itself out to render a television signal transmission service, over its own lines, to any antenna company applicant. Thus, such service may now be provided in areas where there is a need therefor, by other means. Under the circumstances, the commission dismissed the instant complaint for lack of jurisdiction. *West Elmira T. V. Cable Co., Inc. v. New York Teleph. Co. Case 21548, January 17, 1961.*

Policy Statement of Area Prices for Gas Producers Is Not Final Order

THE Federal Power Commission denied an application filed by the Wisconsin commission for rehearing of its recent Statement of General Policy No. 61-1 establishing rate standards for independent natural gas producers. It was pointed out that the statement is not a final order. The statement will be used as a standard in determining whether to suspend rates and whether to deny or condition certificates with respect to price. The price standards are subject to change from time to time. They are not final determinations of producer rates. They will be applied to producer applications subject to all the requirements of the Natural Gas Act and the commission's rules respecting hearings. *Re Statement of General Policy No. 61-1, November 25, 1960.*

California Commission Certificates Multimillion-dollar Gas Pipeline Project

THE California commission has granted Southern California Gas and Southern Counties Gas a joint certificate to construct a multimillion-dollar pipeline from the Rock Springs project of El Paso Natural Gas Company at the Nevada-California border.

Main advantages of the project, as the commission saw it, were threefold: First, the project would provide a direct connection to a new area with gas potential and indirectly to Canada. Second, it would help assure a long-term supply for the firm customers in southern California. Third, it would help alleviate the serious smog condition in Los Angeles county, as the gas could be used by industry and not wasted, assuming a reasonable load-building period.

However, as the contracts between the applicants and El Paso stood, the commission noted many disadvantages. There was not sufficient exportable gas in the new area alone to justify the project. Large blocks of gas had to be brought to Rock Springs from other areas. A witness for the applicants had testified that it would be necessary to have a rate increase in the early years of the project in its present posture. Under present conditions, the project did not appear economically justifiable for eight years or fully advantageous for fourteen years. The firm customers would not need the project for about seven years.

The oil companies had advanced the position that the project would endanger the economic balance of a two-fuel economy in the state from the standpoint of the fuel-using public and gas system eco-

nomics. The contracts were outdated, thought the commission. In view of the expressed willingness of El Paso to entertain modification, the contracts in their present form were not consistent with the public interest, particularly in their exclusion of other potentially economical sources of supply.

Therefore, the certificate grant was conditioned upon the applicants obtaining contract revisions or new contracts to eliminate the need for a rate increase, to reduce the period before the project was economically feasible, and to maintain a reasonable balance in the two-fuel economy. El Paso had so much to gain from the project, the commission said, that at a minimum it should share the benefits with the California ratepayers and underwrite the early losses and dangers to the economic balance of a two-fuel economy. *Re Southern California Gas Co. et al. Decision No. 61261, Application No. 40588, December 28, 1960.*

Colorado Commission in Favor of Normalization For Gas Purchases and Sales

The Colorado commission felt that an attempt at normalization of a gas company's purchases and sales was justified. Since the method of normalization is not an exact science, as it does not take into account cloudy days or wind velocity, thereby resulting in the exercise of judgment, the commission said, it would, nevertheless, accept the principle of normalization.

Although normally the commission was reluctant to adjust expenses that were out of period, it did include in operating expenses the test-year cost of a new employee retirement plan. The expense would be a recurring one in future years.

The commission adopted an end-of-period rate base, because of inflationary times. Fifty per cent of the accrued income and property taxes for the test year was offset against working capital requirements. Fifty per cent of customer advances in aid of construction was deducted from the rate base in view of the company's practice of making repayment to customers in advance of the expiration of extension contracts.

The increase granted would produce a return of 6.25 per cent on the net plant in service rate base. The commission considered such return reasonable. *Re Plateau Nat. Gas Co. Application No. 17733, Decision No. 55456, November 25, 1960.*

Commission Order Requiring Crossing Protection Reversed

The Indiana supreme court reversed a commission order requiring a railroad to furnish a flagman at a county highway crossing pursuant to statute. The commission had conducted its own investigation, after termination of the hearing, without notice to the parties and without making a record thereof. The commission had not made specific findings that the railroad was unable to remove an obstruction to view.

In a proceeding to require the installation of additional warning facilities at extra-hazardous grade crossings, said the court, the law governing petitions, hearings, and proceedings before the commis-

sion in regard to rates and service of utilities is applicable. The commission could not act on its own independent information, but had to base its findings upon evidence presented in the case, with an opportunity to cross-examine witnesses, to inspect documents or exhibits, and to offer evidence in explanation or rebuttal. Nothing could be treated as evidence which had not been introduced as such. *Monon Railroad v. Indiana Pub. Service Commission et al. 170 NE2d 441.*

Air Routes Awarded to Economically Stronger Of Two Competitive Applicants

THE District of Columbia appeals court sustained the Civil Aeronautics Board in awarding certain routes in Tennessee to Southern Airways, Inc., in a competitive certificate proceeding. Southern is a federally certificated line with extensive routes serving the southeastern part of the country. The review proceeding was brought by Southeastern Aviation, Inc., a Tennessee intrastate airline, which actively sought authority to serve the routes.

Notice of Competitive Application

Southeastern contended that it was deprived of a full and fair hearing in that it was unaware that Southern was a competitive applicant. Southern had assumed that the routes were not economically feasible and apparently did not present specific data regarding them. However, this company had indicated to the commission that if the routes were to be certificated, Southern would like to serve them and would oppose Southeastern's application. It appeared that Southeastern's brief to the examiner treated Southern as a competitive applicant. In view of these facts, the court thought Southeastern had fair notice of Southern's competitive position and that the board could properly certificate Southern.

Federal Certification Necessary

Primarily, Southeastern argued that the board could not certificate Southern without first determining that the existing state certificated service was inadequate and that Tennessee could support two carriers on parallel routes. There was little doubt that the public convenience and necessity demanded federally certificated service in Tennessee. Federally certificated airlines are eligible for federal subsidy as well as other benefits such as interline connections and mail carrying privileges. Since short-haul operations are extremely expensive, some subsidy seemed vital to local line survival. There was no evidence that the state of Tennessee would provide a subsidy. The board had therefore concluded that federal certification and its attendant economic benefits were necessary if Tennessee were to obtain the air service best suited to its, and the nation's, welfare.

Realistically then, said the court, the problem was not whether the existing state service was adequate, nor whether Tennessee could support two parallel lines, but rather which of several competing lines seeking federal certification, among them Southeastern, would best qualify.

On substantial evidence the board had found that Southeastern's financial structure was weak, that the company had experienced considerable losses, and that it had not been shown that certification would improve its revenues. It was fur-

ther found that a larger system than Southeastern's was necessary to spread indirect costs and compete with trunk lines. The Tennessee routes would integrate with Southern's existing system, with substantial benefits to passengers and terminals beyond Tennessee. The board had concluded that the prospective public benefits from service by Southeastern were far less than would be provided by Southern service. Moreover, Southern, a larger and economically stronger airline, would be a smaller burden on the government. In these circumstances the court was unable to find that the board had acted arbitrarily in certificating Southern. *Southeastern Aviation, Inc. v. Civil Aeronautics Board, 283 F2d 189.*

Other Recent Rulings

Obligations Affecting Service Discontinuance. In authorizing the discontinuance of a railroad station, the Florida commission pointed out that the question whether and to what extent the railroad was legally obligated to a particular individual with respect to the station service was not a subject for consideration in the case; only the issue of public convenience and necessity was involved. *Re Butler et al. Docket No. 6077-RR, Order No. 3064, November 30, 1960.*

Return Plus Assessment. The Wisconsin commission considered a return of 1.7 per cent on a municipal sewer plant's net book value rate base reasonable in view of special assessments levied against customers by the municipality. *Re City of Amery, 2-U-5443, December 8, 1960.*

Municipal Water Plant Return. The Wisconsin commission considered a return of 5.5 per cent on a municipal water plant's net book value rate base reasonable. *Re Village of Wauzeka, 2-U-5453, December 8, 1960.*

Minimum Return Level. The Wisconsin commission pointed out that a normal return for a municipal water plant would be 5.5 per cent, and where no large cash reserve exists it recommends a level of return no less than 4 per cent with which to meet unforeseen cash requirements for plant additions or repairs. *Re Village of Edgar, 2-U-5455, December 8, 1960.*

Existing Service Adequate. The Colorado commission held that service to satisfied customers by an existing private carrier is not sufficient to authorize the granting of a common carrier certificate where existing service is adequate. *Re Ephraim-King Transp., Inc. (Ephraim Freightways, Inc.), Application No. 12742, Decision No. 55542, December 9, 1960.*

Water Company Return. The New Jersey commission considered a return of 6.2 per cent on a water company's original cost rate base reasonable. *Re Frenchtown Water Co. Docket No. 609-681, December 23, 1960.*

Factors Affecting Discontinuance. The New Jersey commission pointed out that, in station agency discontinuance cases, it was required to give primary consideration to public convenience and necessity and treat financial results of the operation involved as matters for secondary consideration. *Re Railway Express*

Agency, Inc. Docket No. 6010-712, December 23, 1960.

Construction Work in Progress. The New Jersey commission held that construction work in progress should be excluded from an original cost rate base where the company capitalizes interest during construction. *Re Commonwealth Water Co. Docket No. 606-441, December 29, 1960.*

Constitutional Applicability. The U. S. district court pointed out that administrative agencies have power to determine constitutional applicability as distinguished from constitutionality of legislation itself. *Interior Airways, Inc. v. Wien Alaska Airlines, Inc. et al. 188 F Supp 107.*

Common Carrier Adequacy Not Relevant. The U. S. district court held that the approval or disapproval of a contract carrier permit application cannot be based upon whether or not the proposed service is provided by common carriers or is one which they are unwilling or unable to provide since the new test under § 203(a)(15) of the Interstate Commerce Act is whether the service is designed to meet the distinct need of each individual customer. *Reddish et al. v. United States et al. 188 F Supp 160.*

Moot Question. The U. S. district court held that a three-judge federal court could not give opinions upon moot questions or abstract propositions or declare principles or rules of law which could not affect the matter in issue in the case before it, but could only decide actual controversies which could be carried into effect. *Cargil, Inc. et al. v. United States et al. 188 F Supp 386.*

Summary Judgment. The U. S. district court held that a party seeking summary judgment in an action for an injunction to prevent the defendant from acting under the Interstate Commerce Act has the burden of establishing the facts with respect to which there is no dispute since it must clearly appear that there is no genuine issue of a material fact. *Long Island R. Co. et al. v. New York C. R. Co. 26 FRD 145.*

Adequacy of Existing Service. On review of a commission order granting certificate extensions, the Florida supreme court held that the commission properly refused to consider service instituted by competing carriers subsequent to the date of the application. *Greyhound Corp. v. Carter et al. 124 So2d 9.*

Adequacy of Existing Service. Adequacy, as it relates to motor carrier service, is a relative term, the Kentucky appeals court pointed out, and the question, upon application to establish a new service in place of allegedly inadequate existing service, is whether the existing service is reasonably adequate. *Farson Motor Lines, Inc. v. Pinson Transfer Co., Inc. et al. 339 SW2d 469.*

Sewer Rate of Return. The Pennsylvania commission held that a return of 3.94 per cent on the depreciated original cost rate base of a municipal sewer plant was neither excessive nor unreasonable. *Shover et al. v. Borough of Highspire Sewer System, Complaint Docket No. 17426, December 12, 1960.*

Why Electro-Motive peakingpo

You can put the

When you put the peaking power at the point of load (which can best be done with Electro-Motive Peaking Plants) you gain these five important system improvements:

REDUCED ANNUAL COSTS— You defer investment for new transmission equipment. You generate peaking power without transmission loss.

AUTOMATIC PEAKING POWER—You get automatic, unattended peaking

power . . .
aration-

AREA P
matic, (
in case

INDEPEN
peaking
eration
station

STANDA
standar
ment, c

ng power makes sense

put the peaking power at the point of load

g powe
an bes
Peakin
impor

u defe
missio
peakin
n loss

R—Yo
peakin

power . . practically eliminate prep-
aration-f peak expenses.

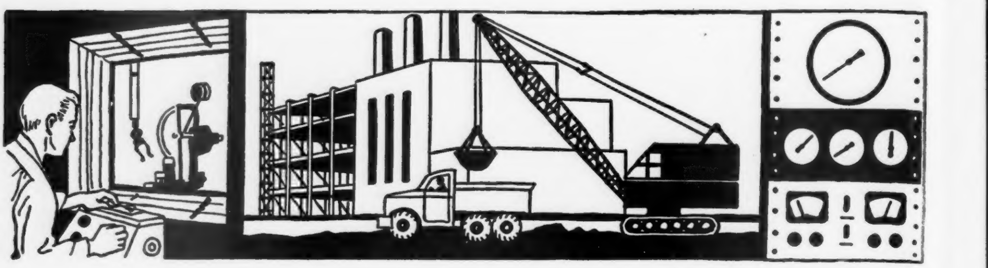
AREA PR ECTION—You gain auto-
matic, u ttended area protection
in case c ine outage.

INDEPEN NT MAINTENANCE—Your
peaking nd area protection gen-
eration i not affected by central
station m ntenance.

STANDAR IZED EQUIPMENT—You get
standard ed Electro-Motive equip-
ment, co pletely self-housed, port-
able and conveniently sized to fit any location.

The logic of decentralized Electro-Motive Peaking Plants can be the answer, if you are looking for the next step in system efficiency. Electro-Motive power can mean substantial savings in many areas of your system operation. For a complete description of all the advantages of decentralized Electro-Motive Peaking Plants, contact your Electro-Motive representative.

Industrial Progress



40 Million Kilowatts of New Capacity Scheduled for Electric Industry

THE electric industry has more than 40 million kilowatts of new capacity on order and scheduled for service, about 85 per cent of which is to be in operation by the end of 1963, it was reported in the "1960 Year-End Summary of the Electric Power Situation in the United States" just completed by the Edison Electric Institute.

James P. Hayward, president of Atlantic City Electric Company noted that at the end of 1960, the generating capability of the total electric utility industry of the contiguous United States (not including Alaska and Hawaii) reached more than 175 million kilowatts. This was more than 7 per cent over the capability at the end of 1959.

Prepared by the Institute's Electric Power Survey Committee, the summary is produced in co-operation with power systems and equipment manufacturers throughout the country and constitutes the most complete compilation of data available so early in the year. The report presents information concerning the electric power supply, expansion of electric generating facilities, and production of heavy electric power equipment in the United States as of the end of 1960.

In 1961, 12,455,100 kilowatts are scheduled to go into operation — 8.6 per cent more than reported by the Survey of last October. Capacity additions scheduled for 1962 have increased 1.1 per cent since last October, while those for 1963 have increased 17.7 per cent.

During 1960 the total capacity of new electric generating units, 4,000 kw and larger, placed in commercial operation in the contiguous United States by the total electric utility industry was 11,113,730 kilowatts. Among the 82 thermal units which started in operation in 1960 are two atomic powered units—the Commonwealth Edison Company's Dresden installation with 180,000 kilowatts of electric generating capacity, and the Yankee Atomic Electric Company's installation of 136,000 kilowatts.

Information on power supply presented in the report covers the total electric utility industry, including investor-owned utility systems and those of governmental agencies — Federal and non-Federal. Data on the expansion of electric generating facilities and the production of heavy electric power equipment are virtually 100 per cent complete. In addition to information covering the contiguous United States, the year-end report contains separate data for the State of Hawaii.

$131 Million Program Planned By Southern California Edison

A CONSTRUCTION budget of $131 million was announced recently by Southern California Edison Company for 1961—the sixth consecutive year that the power company's plant outlays have exceeded $100 million.

During the past ten years Edison has spent more than $1 billion in additions and improvements to its electrical system serving Central and Southern California, according to Harold Quinton, Edison chairman.

Edison expects to install about 62,000 new electric meters in 1961 in the 10 counties it serves—equivalent to the addition of a new city on its system of about 200,000 population, Mr. Quinton said.

The total population of Edison's service area is now 4.8 million and Mr. Quinton looks for this figure to reach 10 million by 1985.

"By then," he said, "we expect to have reached a goal considered almost incredible a decade ago—a peak electrical demand on our system of 10 million kilowatts."

Edison has more than a milli[on] kilowatts of additional generati[ng] capacity either under construct[ion] now or authorized for the near [fu]ture, Mr. Quinton announced.

Among the current projects, [he] said, are the world's first comput[er] automated generating units. These [are] being built at the Huntington Be[ach] steam station. The computer contr[ol] will utilize an electronic brain t[hat] can remember as many as 2,0[00] chores to be done in operating [the] huge equipment.

With mid-year completion of U[nit] 4 at Huntington Beach, Edison's to[tal] investment at that one installati[on] will exceed $110 million, he point[ed] out.

At Alamitos steam station, ne[ar] Long Beach, work is progressing [on] two units that will nearly triple t[he] generating capacity of the prese[nt] plant. Mr. Quinton said the n[ew] units, each rated at 310,000 kilowat[ts] will cost about $78 million and a[re] scheduled for completion next year.

Nine new distribution substatio[ns] are slated for construction duri[ng] 1961 in response to the continui[ng] rapid growth of Central and Sout[h]ern California. Modernization pr[oj]ects also are planned this year to i[n]crease the electrical capacity at [a] number of existing substations to fu[r]ther help the area's development, [he] said.

Georgia Power Plans Greate[st] Construction Program in Histo[ry]

GEORGIA Power Company re[]cently announced the greatest co[n]struction budget in the firm's histo[ry] —a scheduled 1961 expenditure [of] $59½ million.

John J. McDonough, preside[nt] also reported Georgia's economic e[x]pansion for the next three years w[ill] increase demands for electric pow[er] by more than a billion kilowatt-hou[rs] a year. He predicted similar grow[th]

continue "beyond the next three- period."

r. McDonough said that the com-'s 1961 construction budget is million larger than the capital in-ment of the 83 new industries h located in the company's serv-rea last year.

he company will make a substan-investment in continuing work on Southern Electric Generating pany's million - kilowatt steam-ric generating plant near coal s at Wilsonville, Ala. This plant jointly owned by the Georgia er Company and Alabama Power pany. The plant's first two units, a generating capacity of 250,000 watts each, went into service in). In 1961 a third unit will begin ation. Georgia receives half of plant's output.

ne of the company's top 1961 ects will be continuing construc-on Plant McDonough near At-. This 500,000-kilowatt project started in 1960 and will cost ap-imately $66 million when com-d in 1964. The first unit is duled for completion in 1963 and second unit in 1964. An estimat-11,750,000 will be spent on this t in 1961.

he company will spend $4,240,000 961 for installing 30,000 kilowatts ew hydroelectric generating fa-es at the existing North High-s dam near Columbus. This proj-is scheduled for completion in , 1962, at a budgeted cost of $7,-000.

ork will continue on building 47 s of 230,000-volt transmission from Morrow to Winder and a 000-kilowatt substation at Win-Total cost will be nearly $2,-000.

pproximately $1,325,000 will be t in 1961 for continuing work on miles of 230,000-volt transmission from the Goat Rock plant, near mbus, to Bonaire, near Macon. project will be completed in at a cost of nearly $3,500,000.

hirty-eight miles of 110,000-volt smission line are under construc-from Tifton to Plant Mitchell, Albany. Cost will be $1,300,000, which $1,100,000 will be spent in .

lanta area substations and con-ng transmission lines will be at Bolton, Riverdale, Peachtree et, Spalding Drive, Smyrna and edere.

Delaware Power & Light Plans $23,000,000 Program

AUSTIN T. GARDNER, president of Delaware Power & Light Company recently announced that the company expects to spend almost $23 million on new construction projects throughout Delmarva Peninsula in 1961, the 16th successive year of expansion by the company. It was pointed out that the construction budget for 1961 does not include initial work on the proposed new 150,000 kilowatt generating unit at the company's Edge Moor power station which has been deferred until 1962.

To be certain its facilities are always adequate to meet all the increasing needs of this growing area for its services, the company's construction budget includes $6,565,000 during the year for completion of the additional 60,000 kilowatt generating unit now under construction at the Delaware City power station. This unit is expected to be in operation about December of this year.

About $4,500,000 will be spent on additions to and strengthening of the company's 138,000-volt transmission system and expansion of substations. Over $9 million will be expended throughout the Peninsula-wide distribution system for poles, lines, transformers, substations and service facilities to meet the growing needs of present customers and the ever increasing number of new customers.

The company proposes to construct a million cubic foot per hour propane-air gas plant at an estimated cost of $750,000. This proposed plant will be tied-in with the recently announced man-made underground cavern of the Sun Oil Company at Marcus Hook, Pa., and connected to the gas transmission system of the Delaware Power & Light Company at Claymont, Delaware.

The balance of the 1961 expenditures will be made on numerous smaller projects including transportation, tools, office equipment, office and plant facilities.

Gas Industry Becomes First Exhibitor To Sign For New York World's Fair

TWO signatures—one on a contract, the other on a $100,000 check—have clinched another "first" for the gas industry. The industry is the first exhibitor to contract for space at the 1964-65 New York World's Fair.

John E. Heyke, president of The

(*Continued on page* 20)

Brooklyn Union Gas Co., turned the check over t New York World's Fair Corp. in December as pres of Gas, Inc. The new gas corporation is an oper unit formed especially for the fair by the Ame Gas Association, which represents the nation's n gas utilities, pipeline companies and manufacture gas appliances and equipment.

The signing of the contract January 1 th foll by one day the dedication of the fair's new admini tion building, where gas is used for all heating conditioning, water heating and cooking.

In presenting the industry's check for half of its year's rent at the fair, Mr. Heyke observed that tory is repeating itself." The gas industry was the lessee to contract for exhibit space at the 19 New York World's Fair and the first to constr private building at the Flushing Meadow fair site.

Walter Dorwin Teague Associates, one of the tion's leading architectural and industrial design f has been retained to design the $5.5 million gas i try exhibit building.

New Mobile Telephone Equipment With Duplex Dial System Offered by G-E

A NEW type of automobile-telephone eliminatin age-old problem of half-heard messages is being i duced by General Electric Company for use in veh receiving mobile telephone service through telep companies or answering services.

Previously, when a person in a car was transmi a message to a home or office telephone and th cipient attempted to interrupt, the voice of the wire party at home couldn't be heard in the car becaus vehicle's push-to-talk button wasn't in the proper tion. This occurred because the receiver in the car disconnected automatically whenever the driver ta

General Electric's new telephone device is engine so the vehicle's receiver is no longer inoperative the car transmits. The new design permits the rec to remain on and ready to receive a message, pic up the conversation immediately when the home p begins to talk.

The first of its type in the communications indu it permits the driver to hear the wire-line party i latter cuts in during a transmission. Thus, the last of the mobile unit's message isn't lost while the w line party tries to interrupt and the car hears all remarks of the person cutting in. The new system mits free-flowing conversation identical to conventi telephone service.

General Electric calls the new feature "full si taneous duplex," signifying simultaneous two-way versation. It will be especially beneficial in insta where people involved in the conversation with mobile are not aware that the telephone is in a car that special procedures have been required to a message confusion.

Where Direct Distance Dialing service is avai through telephone companies, a car equipped with new General Electric two-way dial mobile telep will be able to place and receive calls to and from part of the country without the services of an oper to route the call. The two-way dialing system comb with Direct Distance Dialing makes the connection tomatically. Where Direct Distance Dialing is not available, a telephone operator is used.

G-E Appointment

LIP H. LIGHT has been named ager-Electric Utility Analytical neering for General Electric's ric Utility Engineering Operait was announced recently.

cording to James F. Young, ral Manager-Electric Utility Enering Operation, Mr. Light will esponsible for the development ew methods of power system sis such as the use of mathecal models, computer applications other advanced technologies and epts to benefit national and internal electric utilities in their sysplanning and operation.

mportance of such work will ine as electric utilities turn more ystem planning, operation and rol to continue improving the omy of their electrical service," Young said.

Ir. Light has been with General tric for more than 25 years and gs a wealth of experience in all es of electric utility engineering his new position," Mr. Young d.

Univac Division Announces New Marketing Plan

E Remington Rand Univac Divi- of Sperry Rand Corporation has unced a marketing plan that per- users of Univac File-Computers uble the data processing capacity heir present systems, at no inse in rental charges. The plan also s users the opportunity of puring their rented computers on a rred payment plan, at reductions roximating 40 per cent of the inal list price.

he company is offering to double processing speed of existing lel 1 File-Computers by replacing present magnetic storage drum magnetic core memory. The new storage which is primarily the e as that of the large-scale Uni- III computer system, has a mory" capacity of 2000 12-charr alphanumeric words — double of the present File-Computers.

This unique field installation plan n line with our policy of offering vac customers the advantages of latest developments in the comr field," Jay W. Schnackel, vice sident and general manager of the sion, said. "In a typical applica-, a 100 per cent increase in oping speeds will be obtainable with modification in existing programs. This represents data processing capabilities far in excess of that available in present systems, at no extra rental cost."

The terms of the plan call for a two-year extension of the existing rental contract. The two-year period is from the date of installation of the new magnetic core unit.

The purchasing arrangement, under the plan, is on a three, four or five year deferred payment basis. The actual price of the Univac File-Computer system in each case will be determined by the age of the equipment at the time of purchase. The new magnetic core unit will be available to the purchaser at a cost of approximately one hundred thousand dollars.

Allis-Chalmers To Supply Turbines For Susquehanna Power Project

ALLIS - CHALMERS has been awarded a contract to build four large turbines for Susquehanna Power

(*Continued on page 22*)

Company, a subsidiary of the Philadelphia Electric Company, subject to the approval of the Federal Power Commission.

Four vertical fixed-blade propeller-type Allis-Chalmers hydraulic turbines will be installed in the Susquehanna Power Company's Conowingo hydroelectric station located on the Susquehanna river in Maryland. Scheduled for operation some time in 1965, the new turbines will about double the present 252,000-kw rating of the plant.

The four propeller-type hydraulic turbines will be rated 85,000 horsepower under an 86 foot head at a speed of 120 rpm. They will be mounted in plate steel spiral casings, which will equal in size the largest spiral casings ever built in the free world. These spiral casings will measure 27 feet 6 inches at the inlet diameter and will be assembled and welded in place at the dam site.

Future Telephone Load Expected to be Heavy With Data Transmission

TELEPHONE trunk lines of the future will have an added burden of data transmission "in various forms," the nation's electrical engineers were informed recently.

"This means that more stringent quality requirements must be met," J. D. Howard, Jr., Southern Bell Telephone and Telegraph Company, Nashville, Tenn., pointed out in a paper, Administration of Exchanges and Trunks for Good Transmission, presented at a communications symposium during the Winter General Meeting of the American Institu Electrical Engineers held in York City recently.

Increased data transmission will call for increased use of tronic repeaters and "carrier e ment which require a better qu of basic outside plant facility."

Mr. Howard's paper reported study of methods of handling phone trunk assignments in the lanta metropolitan area of Sout Bell. The committee, which bega the study in 1956, also studied si plans on Long Island, Baltimore Northern California. "These inv gations indicated that very little relation exists in the methods b used in different areas," largely cause of local conditions which "unique and require arrangeme

PROFESSIONAL DIRECTORY

• This Directory is reserved for engineers, accountants, rate experts, consultants, and others equipped to serve utilities in all matters relating to rate questions, appraisals, valuations, special reports, investigations, financing, design, and construction.

Mention the FORTNIGHTLY—*It identifies your inquiry*

PROFESSIONAL DIRECTORY
(continued)

(Professional Directory Continued on Next Page)

PROFESSIONAL DIRECTORY
(continued)

Mention the FORTNIGHTLY—*It identifies your inquiry*

PROFESSIONAL DIRECTORY
(continued)

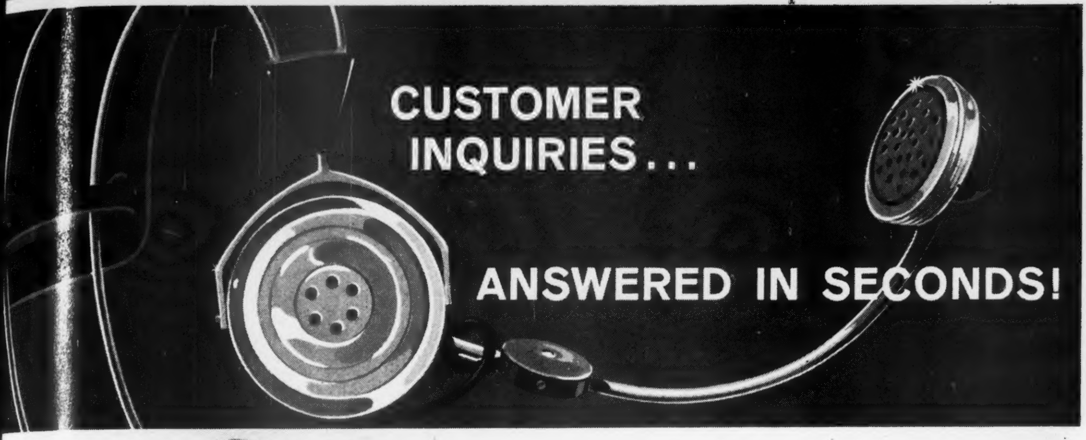
(Professional Directory Continued on Next Page)

PROFESSIONAL DIRECTORY
(continued)

Mention the FORTNIGHTLY*—It identifies your inquiry*

INDEX TO ADVERTISERS

*Fortnightly advertisers not in this issue.


CUSTOMER
INQUIRIES...
ANSWERED IN SECONDS!